

<210> 240  
 <211> 1117  
 <212> DNA  
 <213> Homo sapiens  
 <220>  
 <221> misc feature  
 <222> (1113)  
 <223> n equals a,t,g, or c

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 <212> DNA  
 <213> Homo sapiens  
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 <221> misc feature  
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<220>  
 <221> misc feature  
 <222> (2371)  
 <223> n equals a,t,g, or c

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<211> 3276

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (125)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (455)



<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1014)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3276)

<223> n equals a,t,g, or c

<400> 242

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&lt;210&gt; 243

&lt;211&gt; 736

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (435)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 243

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&lt;210&gt; 244

&lt;211&gt; 2311

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (236)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (983)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1471)

<223> n equals a,t,g, or c

<400> 244

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2311

<210> 245

<211> 4065

<212> DNA

<213> Homo sapiens

<400> 245

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 4065

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&lt;210&gt; 246

&lt;211&gt; 1485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (635)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 246

```

cgtggttcga tgggaaggat ctttctccaa gtggttcctc ttgaggggag catttctgct 60
ggctccagga ctttggccat ctataaagct tggcaatgag aaataagaaa attctcaagg 120
aggacgagct cttgagtgag acccaacaag ctgcttttca ccaaattgca atggagcctt 180
tcgaaatcaa tgttccaaag cccaagagga gaaatggggt gaacttctcc ctagtgtgg 240
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cccagggtgc tccagggaag caaggagcca ctggcacccc aggacccaa ggagagaagg 780
gcagcaaaagg cgatgggggt ctcattggcc caaaagggga aactggaact aaggagaga 840

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```

aaggagacct ggggtctccca ggaagcaaaag gggacagggg catgaaagga gatgcagggg 900
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```

<210> 247

<211> 1486

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (146)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1447)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1449)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1472)

<223> n equals a,t,g, or c

<400> 247

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gtgccaaagg caacatgggt gagccgggag agcctggcca gaagggaaga caggagagacc 480
cgggcatcga agggccatt ggattccag gacccaagg cgcttcctggc ttcaaaggag 540
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ctggaaaccg gggccccgac ggttacccgg ggaagcagg gagtccagg gagcagaggag 720
accaaggcgg caagggggac cctggccgcc caggacgcag agggcccccg ggagaaatcg 780

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```

gggccaaggg aagcaagggg tatcaaggca acartggagc cccaggaagt cctggtgtga 840
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<210> 248

<211> 1994

<212> DNA

<213> Homo sapiens

<400> 248

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gttccattcc taactctgcc tcaaactgta catttgata agccctagta gttccctggg 1920

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cctgttttttc tataaaacga ggcaactgga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1980  
aaaaaaaaaa aaag 1994

<210> 249

<211> 1661

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (810)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1627)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1633)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1648)

<223> n equals a,t,g, or c

<400> 249

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gactgcagcg tgacctgcg gaagggcatg cgaacccgac agcggatctc aagtctctgg 120  
cagaacttgg agactgcaat gaggatctgg agcaggtgga gaagtgcag ctccctgaat 180  
gccccattga ctgtgagctc accgagtggc cccagtggtc ggaatgtaac aagtcatgtg 240  
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aagagtctga aggggagcag ttcccagggt gtaggatgcg cccatggacg gcctggtcag 480  
aatgcaccaa actgtgcgga ggtggaattc aggaacgtta catgactgta aagaagagat 540  
tcaaaaagctc ccagtttacc agctgcaaa acaagaagga gatcagagca tgcaatgttc 600  
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```

<210> 250

<211> 2358

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<400> 250

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ctcggccag accttcctga ttctgaggc catgacctt gaggaagctg ctgccttgct 180
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tacagtggag aatgtgacag tgttcggaac ggcctcggcc agcaagcacg aggactgaa 360
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gaagatttcc cctaaaggag tggacattgt catggaccct ctgggtgggt cagatactgc 480
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```

<210> 251

<211> 697

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (667)

<223> n equals a,t,g, or c

<400> 251

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gtccaacat ggcaaaaatc tccagcccta cagagactga gcggtgcacg gagtccctga 180
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tttccttcca gcctttctgt catcatctcc acagcccacc catcccctga gcacactaac 540
cacctcatgc agggcccacc tgccaatagt aataaagcaa tgctactttt ttaaaacatg 600
aaaaaaaaaa aaaaaaaaaa ggggggcggt tarargatcc aagyttacgt accgcgtgca 660
tgcgacngtc atagcttttt ctataagtgg tcaccct                                     697

```

<210> 252

<211> 2958

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2286)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2917)

<223> n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2934)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 252

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catttagatc actcttaagc ctttgtggaa ttctgaggaa aaaaagcaag atgcctcaat 120
gccaatgctg gcccataaga ttctactccc ctccctgtag gktggggcgc gtggctcagc 180
tttgaaaaat ctttttgcca gtaatatgtc ctgtgaatcc ctttaagaag tcgtcctgat 240
ctgagcctgt ctttctgagc actttggtgc tgaattgaaa atggtaagct aaagcagtga 300
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taaacccttg tctttaacct ccctttgttg tggagaaaaat gtgtcactaa tcagtgggtcc 420
aagggatatc tagctttggt tactcagttc ctgcagcata acagatatga cttatgccag 480
ggaaggtaga ggctgattat ggagacaccc aggaacagga ataagaaggg ataggtctgc 540
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<210> 253

<211> 2527

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2171)

<223> n equals a,t,g, or c

<400> 253

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&lt;210&gt; 254

&lt;211&gt; 1183

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 254

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&lt;210&gt; 255

&lt;211&gt; 2051

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (50)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2027)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2046)

<223> n equals a,t,g, or c

<400> 255

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<210> 256

<211> 686

<212> DNA

<213> Homo sapiens

<400> 256

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<210> 257

<211> 2322

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2319)

<223> n equals a,t,g, or c

<400> 257

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<210> 258

<211> 2261

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2115)

<223> n equals a,t,g, or c

<400> 258

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<210> 259

<211> 1374

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (929)

<223> n equals a,t,g, or c

<400> 259

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<210> 260

<211> 1958

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1843)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1915)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1934)

<223> n equals a,t,g, or c

<400> 260

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<210> 261

<211> 2952

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<400> 261

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&lt;210&gt; 262

&lt;211&gt; 1367

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1316)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 262

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<210> 263

<211> 2986

<212> DNA

<213> Homo sapiens

<400> 263

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&lt;210&gt; 264

&lt;211&gt; 1027

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 264

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&lt;210&gt; 265

&lt;211&gt; 1561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 265

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&lt;210&gt; 266

&lt;211&gt; 1586

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1509)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1544)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 266

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<210> 267

<211> 772

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (614)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (639)

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<221> misc feature

<222> (707)

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<221> misc feature

<222> (736)

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&lt;400&gt; 267

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&lt;210&gt; 268

&lt;211&gt; 2482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (255)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 268

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&lt;210&gt; 269

&lt;211&gt; 2494

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 269

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<210> 270

<211> 1827

<212> DNA

<213> Homo sapiens

<400> 270

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<210> 271

<211> 3726

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

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<222> (3523)

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<222> (3664)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3687)

<223> n equals a,t,g, or c

<400> 271

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&lt;210&gt; 272

&lt;211&gt; 656

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (198)

&lt;223&gt; n equals a,t,g, or c

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 <223> n equals a,t,g, or c

<220>  
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 <212> DNA  
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 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (1344)  
 <223> n equals a,t,g, or c

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 <211> 2662  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <223> n equals a,t,g, or c

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<211> 2554

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<223> n equals a,t,g, or c



&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (2537)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 276

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&lt;210&gt; 277

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&lt;210&gt; 279

&lt;211&gt; 2412

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 279

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&lt;210&gt; 280

&lt;211&gt; 3572

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 280

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<213> Homo sapiens

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<220>

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<222> (2352)

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<220>

<221> misc feature

<222> (2355)

<223> n equals a,t,g, or c

<400> 281

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&lt;210&gt; 282

&lt;211&gt; 1587

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 282

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<210> 283

<211> 1973

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (48)

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<222> (1581)

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<400> 283

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tcctgcttga actagtctgc tgtcctgtca aatgcatctt tttatttaca tgtcccttaa 1920
attaaagctg atcatgaaag taaaaaaaaa aaaaaaawaa aaaaaaaaaa aaa 1973

```

&lt;210&gt; 284

&lt;211&gt; 1062

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 284

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 1062

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&lt;210&gt; 285

&lt;211&gt; 1419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

<221> misc feature

<222> (148)

<223> n equals a,t,g, or c

<400> 285

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<210> 286

<211> 1958

<212> DNA

<213> Homo sapiens

<400> 286

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<210> 287

<211> 1230

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1012)

<223> n equals a,t,g, or c

<400> 287

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ttacagtctg ttgagtccag ttctgtgcct gtagtctgac agcaggggag tgaggtgagt 180
cctgtcactg ccttcctgtt gtgcagaggt ggagacagat acagggcagc caagtaactt 240
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caccocygga tawtttcctc ccataaatgg aggtgatggg gtctgaaagt gcaactgtaac 360
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<210> 288

<211> 1637

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (781)

<223> n equals a,t,g, or c

<400> 288

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<210> 289  
 <211> 3308  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (3255)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (3269)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (3282)  
 <223> n equals a,t,g, or c

<400> 289  
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<210> 290

<211> 2239

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2205)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2238)

<223> n equals a,t,g, or c

<400> 290

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<210> 291

<211> 1516

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

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<210> 292  
 <211> 2209  
 <212> DNA  
 <213> Homo sapiens

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 <222> (2128)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (2160)  
 <223> n equals a,t,g, or c

<400> 292  
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<210> 293

<211> 2071

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2046)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2054)

<223> n equals a,t,g, or c

&lt;400&gt; 293

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2071

&lt;210&gt; 294

&lt;211&gt; 1851

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1849)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1850)

&lt;223&gt; n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (1851)  
<223> n equals a,t,g, or c

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<212> DNA  
<213> Homo sapiens

<220>  
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<220>  
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<222> (11)  
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<220>  
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 <222> (16)  
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<220>  
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 <222> (195)  
 <223> n equals a,t,g, or c

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 <222> (2971)  
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<220>  
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 <222> (2977)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (2981)  
 <223> n equals a,t,g, or c

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<210> 296

<211> 1282

<212> DNA

<213> Homo sapiens

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<220>

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<222> (1278)

<223> n equals a,t,g, or c

<220>

<221> misc feature

&lt;222&gt; (1281)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 296

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaaaaaaa aaaaaanaa na 1282

```

&lt;210&gt; 297

&lt;211&gt; 678

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 297

```

cggaattccc gggtcgaccc acgcgtccgg aggaaacaaa ccaccctctg ggggtagttt 60
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ataacattcc aatcactatt gtatatatgt gcatgtatct tttaaattaa agatgtctag 180
ttgcttttta taagaccaag aaggagaaaa tccgacaacc tggaaagatt tttgttttca 240
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gattcaaatt tttctaacat atggaaagcc ttttgtcctc caaagatgag tactagggat 480
catgtgttta aaaaaagaaa ggctacgatg actgggcaag aagaaagatg ggaaactgaa 540
taaagcagtt gatcagcatc attggaacat ggggacgagt gacggcagga ggaccacgag 600
gaaataccct caaaactaac ttgtttacaa caaataaag tattcactac caaaaaaaaa 660
aaaaaacct ctaaaaaa 678

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&lt;210&gt; 298

&lt;211&gt; 1682

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

```

<400> 298
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1682

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<210> 299

<211> 1594

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1550)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1592)

<223> n equals a,t,g, or c

<400> 299

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gctcatgcct gtcacctag cactttggga ggccaaggca ggtggatcac ttgaggtcag 60
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gaaatcgctt gaacctggga ggtggaggtt ccagtgcgag gagatcgtag cactgcactc 180
caacctgagc aacagagtga gacaccagct caaaaaaaat tttttaataa taataaaagt 240

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cctattattc aactgggtat gtacattatg gttgaaaggg aacgttttta tccagtctca 300
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aaattacagt tacattttcc tttckgtgat cttcagcata atttcccaga ggcccccttt 420
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atcagtgttc atcatctgaa agctaagtgg ttcgttcaat cactttttca aagttgatag 540
tagattgcat ggtttcatkt ttctcatat tggtttatta attctattta atcaaggaaa 600
ataacttcag attccataaa gtttcagttt attttttagtt tactactagg tgagatagca 660
cattacatac ttttactatc aaatattatt ttagcagctt cccatagtac caaatgattt 720
gattccctac tctcatttyt taaagcata aaatattttat gggcttaaaa aggggggttt 780
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa anaa 1594

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<210> 300

<211> 1102

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1057)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1070)

<223> n equals a,t,g, or c

<400> 300

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ggtccgggac cctgttcaag aacgccgagc gaatgctacg ggtgcgacc tggacaagct 120
ggaccagggc cgtctagtgg acctggtcaa cgccagcttc ggcaagaagc tcagggacga 180
ctacctggcc tcgtgcgcc cgcggtgca ctccatctac gtctccgagg ggtacaacgc 240
cgccgccatt ctgaccatgg agcccgtcct ggggggcacc ccgtacctgg acaaatttgt 300
ggtgagcttc arccgccagg gccaaaggctc cggccagatg ctgtgggagt gcctgcggcg 360
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caaacacagt gatggcagct tctccaacaa gcagtggatc ttcttctggt ttggcctggc 480
tgatatccgg gactcctatg agttgggtcaa ccacgccaaag ggactgccag actcctttca 540
caagccagct tctgacctag gcagctgacc ttcaccatgg acactacagg ccctggaatg 600
gccaggggtg accaaaagcc atgccagctg ggcatgacct caggcagcca gccacaggct 660

```



```

gaagggggct tggtggctga gtgatctgca gaggagaaag cagccccagc tctgcccaga 720
ggaggcgctg aagtgggaca agcacaggaa agaaggggac cagtctagga ccccaacttg 780
actcactcta aagctacaac caaatggcct tcgattttca acctggggat taggggaggg 840
gagggtgcct tccagggctc tactcaggac taaccctaag ggtgagctag tttctgtgcc 900
tctgtgctat gttttgaggg tcccttacct aaaataatac ccctgcctgc gtgatattct 960
accattcatt ttaattcctt tgggtcttgc agtttttcag gargccttga ttaaaatgca 1020
aatacttgtc tgaaaattcc gcttacactt tgaaaanaaa attaaaattn acccccttgg 1080
aaacaaaatt tttttttttt tt 1102

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<210> 301

<211> 1089

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1043)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1073)

<223> n equals a,t,g, or c

<400> 301

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aaatgttttcc aatctatagc agaggtagtt atggaggagg tgatgggtgga tataatggat 180
ttggagggtga tgggtggcaac tatggcgggt gtcctgggtta tagtagtaga gggggctatg 240
gtggtgggtgg accaggatat ggaaaccaag gtggtggata tgggtggagggt ggaggatatg 300
atggtttacaa tgaaggagga aattttggcg gtggttaacta tgggtgggtgg ggggaactata 360
atgatttttg aaattatagt ggacaacagc aatcaaatta tggacccatg aaagggggca 420
gttttggtgg aagaagctcg ggcagtccct atggtgggtg ttatggatct ggtgggtggaa 480
gtggtggata tggtagcaga aggttctaaa aacagcagaa aagggttgaa tgagaaccct 540
acttgccctaa atgaggaatg tctttcctac catctaaaat acgaagggtt ctggctgggt 600
aaggtttgta gttgacagta aaacctgatg acaccatttg tttccctgca agtctacatt 660
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acaccttcaa agggaacatt aaaagttacc rgggccrggc acatgggtca cgcctgtaaw 1020
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ggacgagggc 1089

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<210> 302

<211> 1284

<212> DNA

<213> Homo sapiens

<400> 302

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tggctttgaa ggtgttccag ggtttaagtt ggaaagcccc ctttctgtgc ccaaraggwg 180
tctwaggamc agcttccacc catgrstgaa gacttccttc tggatgcttt gtctgaggac 240
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catctctgaa gtggtttccc aaaccccagc ttcaacgacc caagctggag cccacccccg 360
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aaaaaaaaaa aaaaaaaaaa aatt                                     1284
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<210> 303

<211> 1109

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (638)

<223> n equals a,t,g, or c

<400> 303

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accatgtcat ctcccagtcg gggcaagagg cggatggaca cggacgtggt caagctcatc 120
gagagtaaac atgaggttac gatcctggga ggacttaatg aatttgtagt gaagttttat 180
ggaccacaag gaacaccata tgaaggcgga gtatggaaaag ttagagtgga cctacctgat 240
aaataccctt tcaaactctc atctatagga ttcataaata aaattttcca tcccaacatt 300
gatgaagcgt caggaactgt gtgtctagat gtaattaatc aaacttgga agctctctat 360
gatcttacca atatatttga gtccttcctg cctcagttat tggcctatcc taaccccata 420
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```

gatcctctca atggtgacgc tgcagccatg tacctccacc gaccagaaga atacaagcag 480
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tatgaaagcc acactttgaa ggtawtaaat acacagcntg cagactggga gttgctagca 660
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<210> 304

<211> 588

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (572)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (585)

<223> n equals a,t,g, or c

<400> 304

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agtttttctt gaaatcattg taatgttaac tttgttggtt caaatatctt ggtgattgct 180
tcattatctc ttcaacaaaa aaaaccttta attttgccat tgaaactgta gaactatgcc 240
atgcttttat tagaagcagt gctctgtgtt aacaacaaga atgggtgtaat tagaattggg 300
atgtggatat ttactgtatg acaacacatt tacagttctg taatgcaagg atgcagttta 360
aaaatgtgaa gtagtgatgg tttttgaaat aagctttaaa atatagggat cttgaaggct 420
ccctggggta actattttat aacttagata aaatggctag tcatatctgt gtgtttgtaa 480
agttattttt ttaatatattt aagrttacia ttttaacaat gtagraatga gccaaacttt 540
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<210> 305

<211> 2019

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature  
 <222> (1979)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (1990)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (1995)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (2001)  
 <223> n equals a,t,g, or c

<400> 305  
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 gccttcaatt gggagagaaa gctttatatt tgtaagaaat atatttgata aagtttctta 180  
 aagcaacacc aaaaaaacia aagaaaagct aagtgaattt ttgcacattc tacacacagt 240  
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 aacaatgttt taaacattct tcagtgttct gatttcttat taccoccttt cctcttgggc 360  
 ttttgaactg tatttgatgt tgctttggga taatgtttat aagtcaaaca taagatattg 420  
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 acaaaccagg aagcaccaaa ccccttttca gtttgaactc ttctttgcca ggtgtgagga 540  
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cagggtgacca aaactgaaaa tcaatatatttc catgttttcat taatcaaggc ataaaaataca 1920  
 attaaagcaa aatatttttac attaaaaaaaa aaaaaaaaaa aagggcggcc gctcttaana 1980  
 ggatcccaan ctttnccgta ncgccttcca ttgccaaag 2019

<210> 306

<211> 3317

<212> DNA

<213> Homo sapiens

<400> 306

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 catcccagac tctctgtga tccgaagaat cacaggaagg ctgattcacc ccaagagtgg 180  
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<210> 311

<211> 1296

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (695)

<223> n equals a,t,g, or c

<400> 311

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tgaccagcac tgaagtctat ggggccttca cctgtcccat ccagaacatc agcttctcct 180
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<210> 312

<211> 1348

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1306)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1313)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1316)

<223> n equals a,t,g, or c

<400> 312

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<210> 313

<211> 413

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<400> 313

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tgtctcttat catgttggtg gaggtggccg cagccattgc tggctatgtg tttagagata 180
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accacactgc ttcgatcctg gacaggatgc aggcagattt taagtgcgtg ggggctgcta 300
actacacaga ttgggagaaa atcccttcca tgtcgaagaa ccgagtcctc gactcctgct 360
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<210> 314

<211> 1743

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1731)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1738)

<223> n equals a,t,g, or c

<400> 314

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aagatgcagg gcacccactg gaaacacaga cggcactctg cgaaagagga aggggcgcca 120
ggagcttggg tgagcaaggt tggaggtgat tctgccctc tcccaggct ttctgtatta 180

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gaaaactgaa gcttcaagaa cagacttgcc taacaacagg aaacttgat gtctcgaagt 240
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tcatgggttt actgaagttg ctagaagttt acagaaaagg aagtgcagga acatttcaca 360
aatctacaat ctgtgagtat cacatcctgt atagctgtaa aacttggaat aaggaagggc 420
tgatgacttt cagaagatga aggtaaagtag aaaccgttga tgggactgag aaaccagagt 480
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&lt;210&gt; 315

&lt;211&gt; 2044

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 315

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<210> 316

<211> 1750

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (784)

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<220>

<221> misc feature

<222> (1491)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1671)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1704)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1732)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1734)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
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 <223> n equals a,t,g, or c

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ggtgcccacc tctactgcaga gctgatcga catggccaag tgaactgtgg cagggtccaga 2280
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ccttcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 2383

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<210> 318

<211> 1061

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (81)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (123)

<223> n equals a,t,g, or c

&lt;400&gt; 318

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cancagtttag atgcatcaga aaggagatcc gggatttgta tgtaaacatc cagcctgttc 180
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ttggaattga agctgccgaa atgctattag caaatcttag acatgggtgg actgtggatg 360
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ttattgaatg ccaaggaatt gggatgacaa atccaaatct atagagtatt tgcctcttaa 600
atgatacctc attgatatat tgcactatct cataaatact ataaaataat gactaggaag 660
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```

&lt;210&gt; 319

&lt;211&gt; 2372

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (81)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1048)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1289)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 319

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garcrggggc cggggccccc naagccattc ctgaagtcac gggctggcca ggacattggg 120
gacccgcca tccggtatgg acgactggaa gccagcccc ctcatcaagc cctttggggc 180
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tggcaccacg gtgctggagg atgaggcccg ggagcagggc cggggcatcc atgtcattgt 540
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<210> 320

<211> 438

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (364)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (398)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (424)

<223> n equals a,t,g, or c

&lt;400&gt; 320

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taccatgagc cctacaaaca actaacctgc cactaatagt tatgtcatcc ctcttattaa 300
tcatcatcct agccctaagt ctggcctatg agtgactaca aaaaggatta gactgaaccg 360
aatnaaaaaa aaaaaaaaaa aaactcgrgg gggggccngg taccatycs ccctaaaggg 420
aagnggatta caattcac                                     438

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&lt;210&gt; 321

&lt;211&gt; 2895

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1255)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 321

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<210> 322

<211> 1175

<212> DNA

<213> Homo sapiens

<400> 322

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<210> 323

<211> 3578

<212> DNA

<213> Homo sapiens

<220>  
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 <222> (10)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (3552)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (3557)  
 <223> n equals a,t,g, or c

<400> 323  
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<210> 324

<211> 1715

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<400> 324

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&lt;210&gt; 325

&lt;211&gt; 1688

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 325

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gctggcgagc cgacgcggcg gcggaggagg ctgtgaggag tgtgtggaac aggaccggg 180
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gtctggtgct gccgcctgag tttcaagaat taaagctgca agaggactcc aggagcaaaa 1560
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aaaaaaaaa 1688

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<210> 326

<211> 1632

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1540)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1560)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1615)

<223> n equals a,t,g, or c

<400> 326

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tcggcgcggc ctgagcgccc ggcccgaccc cggccatggg gtgctgctac agcagcgaga 180
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gaggaaggct agaagcctga gcaagtgagg gtagaacctt ttgggactgg cctttgaagc 840
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<210> 327

<211> 2222

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2212)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2214)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2215)

<223> n equals a,t,g, or c

<400> 327

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gg 2222

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&lt;210&gt; 328

&lt;211&gt; 2167

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 328

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<210> 329

<211> 2373

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (70)

<223> n equals a,t,g, or c

<400> 329

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ggaaaagggg agacaacagt acagacacca cccaaggaga ccctttgtcg atccaccact 180
acttccatgg ctacctggct ggtttcagcg tgcgctcagg tcgcctggag agccgcgagg 240
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<210> 330

<211> 1369

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1323)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1329)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1330)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1343)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1358)

<223> n equals a,t,g, or c

<400> 330

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tatttgtgtc acagctcagc tttttggaag acaaactcaa acacctataa tttcatttat 180
atttctaatt cacttggaac ctttctgctt tatgttacct agaaaatgat aatttgtgta 240
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<210> 331

<211> 2864

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (2850)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2858)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2860)

<223> n equals a,t,g, or c

<400> 331

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&lt;210&gt; 332

&lt;211&gt; 1985

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<220>  
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 <222> (360)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (1985)  
 <223> n equals a,t,g, or c

<400> 332

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ggtn 1985

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<210> 333  
 <211> 3087  
 <212> DNA  
 <213> Homo sapiens



<220>  
 <221> misc feature  
 <222> (143)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (166)  
 <223> n equals a,t,g, or c

<400> 333  
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<210> 334

<211> 898

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (849)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (886)

<223> n equals a,t,g, or c

<400> 334

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<210> 335

<211> 944

<212> DNA

<213> Homo sapiens

<220>  
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 <222> (892)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (908)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (917)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (936)  
 <223> n equals a,t,g, or c

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 cacaactac cacctacctc cctcaccaa gcccataaaa ataaaaaatt ataacaaacc 180  
 ctgagaacca aaatgaacga aaatctgttc gcttcattca ttgccccac aatcctaggc 240  
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<210> 336  
 <211> 1607  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (1162)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (1449)

<223> n equals a,t,g, or c

<400> 336

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<210> 337

<211> 3156

<212> DNA

<213> Homo sapiens

<400> 337

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<211> 1015

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (958)

<223> n equals a,t,g, or c

<400> 338

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&lt;210&gt; 339

&lt;211&gt; 2088

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 339

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cttcattattg aagaatttgt tatcaggaaa ctaccagtcc tgcttttac 2088

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&lt;210&gt; 340

&lt;211&gt; 3124

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 340

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<210> 341
<211> 245
<212> DNA
<213> Homo sapiens

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<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c

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<400> 341
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<213> Homo sapiens

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&lt;210&gt; 343

&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (659)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

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<220>  
 <221> misc feature  
 <222> (814)  
 <223> n equals a,t,g, or c

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<220>  
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<220>  
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 <213> Homo sapiens

<220>  
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 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (2564)  
 <223> n equals a,t,g, or c

<400> 345

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<210> 346

<211> 3770

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (380)

<223> n equals a,t,g, or c

<400> 346

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&lt;210&gt; 347

&lt;211&gt; 2358

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 347

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<210> 348

<211> 2044

<212> DNA

<213> Homo sapiens

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<222> (94)

<223> n equals a,t,g, or c

<400> 348

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tgta

2044

&lt;210&gt; 349

&lt;211&gt; 793

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 349

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&lt;210&gt; 350

&lt;211&gt; 1058

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1033)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1034)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 350

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<210> 351

<211> 1348

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (36)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1294)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1307)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1318)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1329)

<223> n equals a,t,g, or c

<400> 351

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tgctcacagt catcaattat agaccccaca acatgcgccc tgaagacaga atgttcata 180

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tcagagctgt gatcttgaga gccctctcct tggctttcct gctgagtctc cgaggagctg 240
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<210> 352

<211> 3170

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (3163)

<223> n equals a,t,g, or c

<400> 352

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&lt;210&gt; 353

&lt;211&gt; 3013

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 353

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&lt;210&gt; 354

&lt;211&gt; 1829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (1338)

&lt;223&gt; n equals a,t,g, or c

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<210> 355

<211> 1642

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1009)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1619)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1641)

<223> n equals a,t,g, or c

<400> 355

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 gactccttgg aatgaatata tgtgttatct ttccaaatga ccttacttta ttctacttat 240  
 gtatacaatt tctctgtcat aatgtcttat tttgtttttc tttttcaatt gtggaagaag 300  
 gcagatcatc aaagtgtgta tgaataagtg tttagaagta caatcaagcc tgcaagtagt 360  
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 atctaaagat acttgtattc tggctgggtg gagaagccat aaactcctaa ggaattagct 480  
 caaagtaagt caacatgtgc atacatctgt tgcacccaaa tgaaagccca accctgactt 540  
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 tccctttctc tttctctttt cctctcttct ctttcttgat tcctctgtct ctctatcatt 780  
 ggctttcccc ttgctaccct ggcagacctg attgacagg gtgacaattc ccatggcaag 840  
 ctaatcccac caggctggca gcttttgaaa tttctatgta aatacagtat ttgtctaagt 900  
 accacactta aatacagtag ttaacgttta agcaccaca ggttggttct ctttgtactt 960  
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&lt;210&gt; 356

&lt;211&gt; 2020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 356

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caaaatacag cacaatggga attgtcagct gaatgaagaa aacctctcta ccaaaacaga 180
agcagtatag gaccgacaag tgtacctctg cactcaatgc tggaatcaaa tccaaagctt 240
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&lt;210&gt; 357

&lt;211&gt; 1217

&lt;212&gt; DNA



<213> Homo sapiens

<220>

<221> misc feature

<222> (1141)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1149)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1157)

<223> n equals a,t,g, or c

<400> 357

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gcttgaagtt ttaatgacaa agaatgaaaa caatagccat gcctttatga agaagatggc 240
agagaacatc aagttaacca gagatgcccc gtctccagat gaatccaaga caaatgaaaa 300
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tgcagattca ccaaaggacc cagtcctccc aatgaaattt tttacacaac ctgaaaagga 420
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cttacaagg traaaatgca tttgcaaagg gagaaaatga aggccaaaca gaagcaggct 1140
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<210> 358

<211> 1963

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<400> 358

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atgatatgca cacaggagat ccaaagcagg accttgctta tgaacgtcag tatgaacagc 180
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tcattgacca gaaggtgtat gagatccagg acatctatga gaacagctgg accaagctga 360
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gtttttgcta ccgtgaaacc tttaacctaga tcagccatca gcctgtcaac tcagttaaca 1860
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<210> 359

<211> 1387

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1313)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1321)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1348)

<223> n equals a,t,g, or c

<400> 359

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<210> 360

<211> 388

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (370)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (371)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

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aaaaatagaa aaaaataaac caggcgtggt ggcacggcct gtaatcctag ccacttggga 180  
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<210> 361  
<211> 291  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
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<220>  
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<220>  
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<220>  
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<220>  
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<220>  
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<220>  
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<220>  
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<220>  
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<220>  
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 <223> n equals a,t,g, or c

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<400> 361  
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 tcctcttctc tggagaagag ctacganctg cccgatggcc aggtcatcac cattingcaat 240  
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<210> 362  
 <211> 412  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (360)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (385)  
 <223> n equals a,t,g, or c

<400> 362  
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cggcggaccg cccgcccgcct cccaagatcc aactacgagc tttttaactg cagcaacttt 180  
aatatacgct attggagctg gaattaccgc ggctgctggc accagacttg cctccaatg 240  
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<210> 363

<211> 351

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (47)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (304)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (307)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (308)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (332)

<223> n equals a,t,g, or c

<400> 363

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agggcaaaaa acgacacagt agtagcagtt cccaaagtag cgaaatcagt actaagagca 180  
aggacaaagc aacaataatt cagatacctg tgcagaattt cgaataaaat atgttggtgc 240  
cattgagaaa ctgaaactct ccgagggaaa aggncttgaa gggccattga gacctgataa 300

attntgnnag acgttgcccc agcaagggttg gnaagtttgc cttttgtttc c

351

&lt;210&gt; 364

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (10)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (17)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (19)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (24)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (26)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (28)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (31)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (34)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (38)

&lt;223&gt; n equals a,t,g, or c



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<220>  
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 <222> (315)  
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 aggaaatggt ggtgtgtgtac tgtttaattt tggcaaagaa aagtttgaag tcaaaaaagg 120  
 tgatcgaatt gcacagctnc atttgcnaac ggatttttta tccagaaata gaagaagttc 180  
 aagccttgga tgacaccgaa agggtttnca ggaggttttg gttccactgg aaagaattaa 240  
 aatttatgcc aagaacagaa ancaagaagt catacctttt tcttaaaaaa aaaaaaangg 300  
 ttttttcttc caagngtttt ggggggtttt 329

<210> 365  
 <211> 663  
 <212> DNA  
 <213> Homo sapiens

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<220>  
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 <222> (508)  
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<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (634)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (648)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (662)  
 <223> n equals a,t,g, or c

<400> 365  
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 gggacttgag cgagccagtt gccggattat tctattttccc ctccctctct cccgccccgt 120

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atctcttttc acccttctcc caccctcgct cgcgtagcca tggcggagcc gtcggcggcc 180
actcagtcctc attccatctc ctcgtcgtcc ttcggagccg agccgtccgc gcccggcggc 240
ggcgggagcc caggagcctg ccccgccctg gggacgaaga gctgcagctc ctctgtgctg 300
gtgcacgata tgattttctg gagagatgtg aagaagactg ggtttgtctt tggcaccacg 360
ctgatcatgc tgctttccct ggcagctttc agtgtcatca gtgtggtttc ttacctcatc 420
ctggctcttc tctctgtcac catcagcttc aggatctaca agtccgtcat ccaagctgta 480
cagaagtcag aanaagggca tccattcnaa gcctacctgg acttnacatt actctgtcct 540
cagaactttc cataattact gaatgctgcc atggtgcaca tcaacagggc ctgaaaatca 600
ttattcgtct ctttctgcta aaaatctggt tgantccttg aaactggntg tcttcatgtg 660
gnt 663

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<210> 366

<211> 238

<212> DNA

<213> Homo sapiens

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<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (223)

<223> n equals a,t,g, or c

<400> 366

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tcctgtntgc cccgcgccaa agtgcccaga gccatgtcca ccccccgaagt gccctgagcc 120
ctgcccacca tcaaagtgtc cacagtcttg cccacctcag cagtgccagc agaaatgtcc 180
tcctgtgaca ccttccccac cctgccagcc aaagtgttca ccnaagagca agtaacag 238

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<210> 367

<211> 291

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (38)

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<220>

<221> misc feature

<222> (133)

<223> n equals a,t,g, or c

<220>  
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<222> (279)  
<223> n equals a,t,g, or c

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<222> (280)  
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<400> 367  
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cgctctctac ctgctggctg ccctaggggg caactcctcc cccagcgcca aggacatcaa 120  
gaagatcttg ganagcgtgg gtatcgaggc ggacgacgac cggctcaaca aggttatcag 180  
tgagctgaat ggaaaaaaca ttgaagacgt cattgcccag ggtattingca agcttgccag 240  
tgtaccngct gggtgggggc tgtaaccgtc tctgntggnn ccaagcctct g 291

<210> 368  
<211> 400  
<212> DNA  
<213> Homo sapiens

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<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<220>

<221> misc feature

<222> (135)

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<222> (149)

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<220>

<221> misc feature

<222> (152)

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<220>

<221> misc feature

<222> (164)

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<222> (186)

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<221> misc feature

<222> (236)

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<220>

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<222> (303)

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<222> (306)

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<220>

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<222> (312)

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<222> (317)

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<222> (372)  
<223> n equals a,t,g, or c

<220>  
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<222> (373)  
<223> n equals a,t,g, or c

<220>  
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<222> (388)  
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<400> 368  
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tggttgagca gcggtngccg cagcttnccc gacttcccca cccaggggt ggtattcagg 120  
gacatctcnc cgtnttgaa ggaccccgnc tnccttcgcg ccgncatcgg cctcctggcg 180  
cgacanctga aggcgaccca cgggggcccgc atcgactaca tcgcaggcct agactnccgg 240  
agagttcctc ttttgcccct ccctgggtcca ggagctttgg actgggctgc gtgggttaatc 300  
cgnaancggt gngaagntgn cnaggnccca attctntggg nttantgatt tcctnggagt 360  
naggggaagn tnnagggtga ggatttanga aaaaggcctt 400

<210> 369  
<211> 428  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (293)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (308)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (342)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (375)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (390)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (419)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (425)  
 <223> n equals a,t,g, or c

<400> 369  
 ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga 60  
 tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg 120  
 atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg 180  
 aacatgctga gaaactgatg aagctgcaga accacgaggt ggccgaatct tcttnaggat 240  
 atcaagaaac cagactgtga tgactgggag aacggctgaa tgcaatggaa tgngcattac 300  
 attttggnaa aaaatgggga attaatcact tctgggaact gnacaaactg ggcaacttgcc 360  
 aaaaatggcc cccantttgg gggactttan ttgagacca attacctgat agccaggtna 420  
 aaagncct 428

<210> 370  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (14)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (31)  
 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (51)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (57)



<223> n equals a,t,g, or c

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<221> misc feature

<222> (128)

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<222> (203)

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<222> (204)

<223> n equals a,t,g, or c

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<222> (219)

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<222> (229)

<223> n equals a,t,g, or c

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<222> (276)

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<222> (300)

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<222> (305)

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 <223> n equals a,t,g, or c

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 <223> n equals a,t,g, or c

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 <223> n equals a,t,g, or c

<220>  
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 <222> (385)  
 <223> n equals a,t,g, or c

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 ttattctgct gcatcaaaac agaataagct ggagcaagta gaaaaggagt tgttgagagt 120  
 agcacaantc ctgaagggaac ccaaagtggc tgcttctgtt ttgaatccct atgtgaagcg 180  
 ttccattaaa gtgaaaagcc tanntgacat cacagcaana gagaggttnt ctcccctaca 240  
 ctaccaacct gntcantttg cttgctgaaa atggtnagatt aagccgatac ccaaggagtn 300  
 gtttntgnnt tttctaacat ggatgagtgt ccatcgcgga gaggtacttn cacagtgacc 360  
 tntggaatct cctttagaag aagcnacact cctctgaatt agaaatgtcc tcaaggcttc 420  
 ctgaggcaag gca 433

<210> 371  
 <211> 538  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (511)  
 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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<222> (529)  
<223> n equals a,t,g, or c

<400> 371  
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ctcctcggac tctgcctca ctcatctaca ccaaccaccc aactatctat aaacctagcc 120  
atggccatcc ccttatgagc gggcgagtg attataggct ttcgctctaa gattaaaaat 180  
gccctagccc acttcttacc acaaggcaca cctacacccc ttatcccat actagttatt 240  
atcgaaacca tcagcctact cattcaacca atagccctgg ccgtacgcct aaccgctaac 300  
attactgcag gccacctact catgcaccta attggaagcg ccaccctagc aatatcaacc 360  
attaaccttc cctctacact tatcatcttc acaattctaa ttctactgac tatcctagaa 420  
atcgctgtcg ccttaatcca agcctacgtt ttcacacttc tagttaagcc tctacctgca 480  
cgacaacaca taaaaaaaaa aaaaaaaaaa ntnaaggggg gggcggggtnc ccaatccc 538

<210> 372  
<211> 405  
<212> DNA  
<213> Homo sapiens

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<222> (5)  
<223> n equals a,t,g, or c

<220>  
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<222> (7)  
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (241)  
<223> n equals a,t,g, or c

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<221> misc feature  
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<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (362)  
 <223> n equals a,t,g, or c

<400> 372  
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 cgcncitagaa ctagtggntc ccccgggctg caggaattcg gcacgaggtc gccaaagatgg 120  
 tgaagcccaa gtacaaagga cggngcacca tcaaccgctc caaggccagc acaaaccag 180  
 ntcgagtgc gggagcanga ggccaaaaca tgagggaccg ggccaccatc cggcgcctga 240  
 ntatgtatag gcaaaaggag cgcaggacga gtcgtggtaa antaattaaa cccctgcaat 300  
 atcaatcaac ggtggcttct ggcacagtgg caagagtaga gccaaatatt aaatggtttg 360  
 gnaacacacg tgtgattaag cagtcacatc taaaaaatt tcaag 405

<210> 373  
 <211> 460  
 <212> DNA  
 <213> Homo sapiens

<400> 373  
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 aggaggactt gaaggagggtg ctgcgttctg aggctggcat cgaactcatc atcgaggacg 120  
 acatcaggcc cgagaagcag aagaggaagc ctgggctgctg gcggagcccc atcaagaaag 180  
 tccggaagtc tctggctctt gacattgtgg atgaggatgt gaagctgatg atgtccacac 240  
 tgcccaagtc tctatccttg ccgacaactg ccccttcaaa ctcttccagc ctcacctgt 300  
 caggatatcaa agaagacaac agcttctccc aagcccacgt caggcctggc ctcactctag 360  
 accctgctta ggatggggga tgtggcaggg gtgctcctgt gctcaccctc tcttgggtgca 420  
 tttttttgga agaataaaat tgccctctctc tttaaaaaaa 460

<210> 374  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (378)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (393)

<223> n equals a,t,g, or c

<400> 374

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cttcctcacc tccaccttct cctgccttc tctcttctct cgtctgagcc cccaggcctt 180
ttccactttg agggaggtgc ttcgaagaat gttgcccaca cctaagtgtt agaagcctat 240
gtccgttcat ccctgagagg tctgaaagaa taaaaataaa ttctaaaaaa aaaaaaaaaa 300
aactcgaggg ggggccccgg acccaatttg ccctataggg agncgattac aattcactgc 360
cgcgttttac aacgtnnnga ctggaaaaac ccn 393
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<210> 375

<211> 587

<212> DNA

<213> Homo sapiens

<220>

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<222> (75)

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<220>  
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<222> (137)  
<223> n equals a,t,g, or c

<220>  
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<222> (208)  
<223> n equals a,t,g, or c

<220>  
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<222> (209)  
<223> n equals a,t,g, or c

<220>  
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<222> (576)

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cctcaacacc acctnctcgc accccgccgg aggaggagac cccattctat accaacacct 180
attctgattt ttcggacacc ctgaaggna tattcttatc ctaccaggct tcggaataat 240
ctcccatatt gtaacttact actccgaaa aaaagaacca tttggataca taggtatgga 300
ctgagctatg atatcaattg gnttcctagg gnttatcgtg agagcacacc atatatttac 360
agtaggaata gacgnagaca cangagcata tttcacctgc gntaccataa tcatngntat 420
ccccaacggg ggncaaagna attaagctgg actaggcaca nttncaggga aagcaataat 480
gaaaanggac tgctgnaaga gnttctgagc cctaagggaat caactttcnt ttcaaccgga 540
agggggggccg aatngggaat gggattaacc aaactnaata attggaa 587
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<210> 376

<211> 461

<212> DNA

<213> Homo sapiens

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 aagccaaaat gggaaaggaa aagactcata tcaacattgt cgtcattgga cacgtagatt 180  
 cgggcaagtc caccactact ggccatctna cctataantn cgggtggcatc gacaaaagan 240  
 ccattgaaaa atttgagaag gaggctgctg agatgggaaa gggctccttc aagtatgcct 300  
 gggctcttga taanctgaaa gctgagcgtg ancgtggtat caccattgat atctccttgt 360  
 ggaaatttga gaccagcaag tactatgtga ctatcattga tgccccagga cacagagact 420  
 ttatcaaaan catgattaca gggacatctc aggctgactg t 461

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<400> 377  
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 atcagacttt gttttaacaa ttgaaagccc accgaagggtg cactaaagca agcccttgat 120  
 ttatttttttg agtcaaactt cttgtgggtgt tttgcgggga tagtgcttat tgaatttttg 180  
 gtttcttttga aataatcact gtttgtttcc cctttgtagc tgggaacttc tggggtagga 240  
 cgttgctgct atcttcagtt ncacagaccc aaccagttac gatggttttg gaccatttat 300  
 gccgggattc gacatcattc cctataatga tctgcccgca ctggagggtat ttcactagcg 360  
 tcatagtgtc cagctcattg ggaatagaaa ttaaagctgt tgaatatatg aattaaaagt 420  
 cattatatga cagtaatgca aatttatctc acttaaggta accacgattc agacttggtc 480  
 ttantacnat caattagttt ccaaccnga gaaantn 517

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 <212> DNA  
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<220>  
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<220>  
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<220>  
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 ccgaaataac tttgtcntcc ggcggaaccc agctgaccct cagcgcnttc cctccaaccc 180  
 ttcccaccgt ntccagtgtg cagcaggctn cgagcaaagt gaacacaacg tgtgccaaaga 240  
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<210> 379  
<211> 491  
<212> DNA  
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<220>  
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<220>  
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 tccgatttcc tctcgccttg caacctccgg gaccatcttc tcggncatct cctgnttctg 120  
 ggacctgnca ccaccgtttt tgtggtttagc tccttcttgc caaccaacca tgagctccca 180  
 gattcgctcag aattattcca ccgacntgga ggcnacccgc aacagcctgg tcnatttgta 240  
 cctgcatgcc tcctacacct acctctctct gggcttctat ttcnaccncc atgatttggc 300  
 tctggaaagc gtnagccnct tcttccacga aactggccga ggagancgag anggctacga 360  
 acgtctcctg aatatgcaaa accagcgtgg gcggccgcgc tctcttccag gaagtcaaca 420  
 agcccnctta aanataattg gggttaaaac cccaaaaancc ntgnaaactt gccattgccc 480  
 tgaaaataaaa a 491

<210> 380  
 <211> 270  
 <212> DNA  
 <213> Homo sapiens

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<220>  
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<222> (222)

<223> n equals a,t,g, or c

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<222> (230)

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<222> (266)

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<400> 380

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ggnccacttg gaaaacccgg tggatatcca tgaagaaaac cactatnnag ataatcccnt 120
tcaacaggct cacaattnga gaaggacagc aacaccacct agggggagcc aaacaggctg 180
gngacgttta aaagaccgnt tncaaangag gtnnacttat tntaaagggn ctnatatatg 240
aagcagagga ggtgataatt agtttntcct 270
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<210> 381

<211> 160

<212> DNA

<213> Homo sapiens

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<222> (136)

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<220>

<221> misc feature

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<220>  
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<220>  
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 <223> n equals a,t,g, or c

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 accaaatatg aagtgagtgt ctatgctctt aaggacactt tgacaagcag accagctcag 120  
 ggagttgtca ccactntgna naatgtcagc ccancaanaa 160

<210> 382  
 <211> 617  
 <212> DNA  
 <213> Homo sapiens

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<220>  
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 <223> n equals a,t,g, or c

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 acgacggaca ggcggtatgtg tccccccag cccctccct ccccatacca aagtgtgac 180  
 aggccctccg tgcctctccc accctggtcc gcctccctgg cctggctcaa ccgagtgcct 240  
 ccgaccccc tctcagccc tccccaccc acaggcccag cctcctcggc ctctgtctc 300  
 gttgtgtgctt ctgcctgtgc tgtgggggag agaggccgca gccaggcctc tgctgccttt 360  
 ctgtgcccc caggttctat ctccccgtca ccccagaggc ctggcttcag gagggagcgg 420  
 agcagcattc tccaggcccc cgttggttgc cctggacgtg tgcgtctgtg ttcgggtgga 480  
 ctgggggtgtg ggatgcacgg nctgtggggg ccggccgtct cagcccgtgt cctgcagccc 540  
 ttgcgctgcg gccgctaaca tntgctacat ggggtgacgg gggctatagc ttactctggt 600  
 gatacatggg ctccgcc 617

<210> 383  
<211> 307  
<212> DNA  
<213> Homo sapiens

<220>  
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cccgccgagg ccctggcagc tgggggtggg cgccgtccgt acgctgcgca ctggacccgc 120  
tctgctctcg gtgcgtaaat tcacaganaa acacgaatgg gttaacaaca gaaaatggca 180  
ttggaacagt gggaatccag caattttgca caggaagcgt tgggaaattt tgttttattgt 240  
tatctccctg aaatttgga caaaatttga aacaaacaaa ttaatttttg gttgcttttg 300  
gaggggtt 307

<210> 384  
<211> 424  
<212> DNA  
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<220>  
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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<400> 384

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gggctatcaa agaagaacat gtgatcatcc aggccgagtt ctatctgaat cctgaccaat 180
caggcgagtt tatgtttgac tttgatggtg atgagatttt ccatgtggat atggcaaaga 240
aggagacggt ctggcggcgt gaagaatttg gacgatttgc cagctttgan gctcaagggtg 300
cattggccaa catagctgtg gacaaagcca acctggaaat catgacaaag cgctccaact 360
atactccgat caccaatgta cctnnagagg tnanctgtgc tcacgancag ccctgtggaa 420
ctga                                         424

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<210> 385

<211> 352

<212> DNA

<213> Homo sapiens

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<222> (289)

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<400> 385

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ggcaaaaagg atcaagactc cagatctgca cctgagccaa agaaacctga ggaaaatcca 180
gcttctaagt tcagttctgc aagcaagtat gctgctctct ctgttgatgg tgaagatgaa 240
aatgaggggag aagattatgc cgaatagacc tctacatcct gtgctttnt cctagtttct 300
ctccaccctg ggaacattcg agagcaaadc aaaacctcta tccagacaag ac          352

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<210> 386

<211> 674

<212> DNA

<213> Homo sapiens

<220>

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<222> (412)

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<220>

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<222> (504)

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<222> (548)  
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<400> 386  
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tgggatggcc atagcaatgg cgcttacagg cggatttggc ttcattccacc acaactgtac 180
acctgaattc caggccaatg aagttcggaa agtgaagaaa tatgaacagg gattcatcac 240
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gcatggtttc tgcggtatcc caatcacaga cacaggccgg atggggagcc gcttggtggg 360
catcatctcc tccagggaca ttgattttct caaagaggag gaacatgact gnttcttgga 420
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ggcaaatgaa attctgcagc gcancaagaa nggaaagggtg ccattgnaa atgagatgat 540
gagcttgngg gcatnatggc cggacaganc tgaagaagaa tcgggctanc cactagcttc 600
aaagatgcca gaacaantgt gggtagggca ncatgggact atgggtgcca gttagggtggc 660
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<210> 387

<211> 309

<212> DNA

<213> Homo sapiens

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<222> (24)

<223> n equals a,t,g, or c

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<220>  
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<220>  
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<223> n equals a,t,g, or c

<400> 387  
tggaaattcc ccgnagacac tatnntaagg tacgcctgca ggtaccggtc cggaattccc 60  
gggtcgaccc acgcgtccgc ccacgcgtcc ggggcggctg agacgccgcc tgcctggcac 120  
ctaggagcgc agcggagccc cgacaccgcc gccgccgcca tggagtccga gaccgaaccc 180  
gagcccgnca cgctcctggn gaagagcccc aaccagcgcc accgcgactt ggagctgagt 240  
ggcgaccgcg gctggagtggt gggccacctc aaggcccacc tgagccgngn ntaccccagag 300  
cgtncgcgn 309

<210> 388  
<211> 408  
<212> DNA  
<213> Homo sapiens

<220>  
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<220>  
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366

<222> (382)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (385)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (403)  
<223> n equals a,t,g, or c

<400> 388  
gcgagagcgc caganagaga agatcggggg gctgaaatcc atcttcatcc taccgctccg 60  
cccgtgttgg tggaatgagc gttgcatgtg tcttgaagag aaaagcagtg ctttggcagg 120  
actctttcag ccccccactg aaacatcacc ctcaagaacc agctaattcc aacatgcctg 180  
ttgttttgac atctggaaca gggtcgcaag cgcancacaa ccagctgcaa atcaggctct 240  
tgcagctggg actcactcca gccctgtccc aggatctata ggagttgcag gccgttccca 300  
ggacgacgct atggtggact anttcttttc agaggcagca ttggtgagca gcttgggggg 360  
aagaaggaan tggaagaagg cnggnattat taataagcaa acntcgat 408

<210> 389  
<211> 601  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

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 <223> n equals a,t,g, or c

<220>  
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 <222> (597)  
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 gacgaaagat gaactgattg cccgcctccg ctgcgtgggt gaacaactga accgtgatgt 120  
 cagcctgacg gggacgaaaag aagaactggc gctccgtgtg gcagagctga aagaggagct 180  
 tgatgacacg aggcctaagc ttggcactgg ccgtcgtttt acaacgtcgt gactgggaaa 240  
 accctggcgt taccctaactt aatcgccttg cagcacatcc ccctttcgcc agctggcgta 300  
 atagcgaaga ggcccgcacc gatcgccctt cccaacagtt gcgnagcctg aatggcgaat 360  
 ggcgcctgat gcggtatttt ctccttacgc atctgtgcgg tatttcacac cgcatatggt 420  
 gcactctcag tacaatctgc tctgatgccg catagttaag ccagccncga caccgcgcaa 480  
 cacccgntga cgcgccctga cgggcttgct gcttccggca tncgcttaca gacaagctgt 540

368

gaccgttccg gnagctgcat gtgtcaaaaag gttttnacccg tatnaccgaa acgcgcnaaa 600  
c 601

<210> 390  
<211> 407  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (298)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (385)  
<223> n equals a,t,g, or c

<220>  
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<222> (389)  
<223> n equals a,t,g, or c

<220>  
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<222> (390)  
<223> n equals a,t,g, or c

<220>  
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<222> (392)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (393)  
<223> n equals a,t,g, or c

<400> 390  
ggtgaccggg gccagggcct atgcctccac cgccaagtgc ctgaacatct gggccctgat 60  
tttgggcatc ttcattgacca ttctgtcat catcatccca gtgttggtcg tccaggccca 120  
gcatagatc aggaggcatc attgaggcca ggagctctgc ccgtgacctg tatccacgt 180  
actctatctt ccattcctcg ccctgcccc agaggccagg agctctgccc ttgacctgta 240  
ttccacttac tccaccttc attcctcgcc ctgtccccac agccgagtcc tgcattcanc 300  
ctttatcctc acacgctttt ctacaatggc attcaataaa gtgtatatgt ttctggtgaa 360  
aaaaaaaaa aaaaaaaaaa aaaaanaann annaaaaaaaa aaaaaaa 407

<210> 391  
<211> 566  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (443)  
<223> n equals a,t,g, or c

<400> 391  
ttcagggttta ttaatgccag aagaagaata gtacagccca tgattgacca gtcaaatacga 60  
gcagtgcagc aaggagcagc atatagtcca gagggtcagc ccatggggag ctttgtgttg 120  
gatggtcagc aacacatggg gatccggcct gcaggtttgc agagcatgcc aggggactac 180  
gtttctcagg gtggtcctat gggaatgagt atggcacagc caagttacac tcctccccag 240  
atgacccac accctactca attaaagacat ggaccccaa tgcattcata ttgtccaagc 300  
catccccacc acccagccat gatgatgcac ggaggacccc ctaccacccc tgggaatgact 360  
atgtcagcac agagccccc aatgttaaat tctgtagatc ccaatgttgg cggacagggt 420  
atggacattc atgcccata gtntaagggg actcaaggga aaagggaaca caccgcaaaaa 480  
ctatttttaag acttctggaa ctttgaccag gtgttgacac ttaatatgaa attccagaca 540  
gctgtgatta tttttaactt tggcat 566

<210> 392  
<211> 425  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (283)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (346)  
<223> n equals a,t,g, or c

<220>  
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<222> (355)  
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (393)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (406)

<223> n equals a,t,g, or c

<400> 392

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cccatctctg accatgaggc caccctgagg tgctggggccc tgggcttcta ccctgcggag 60
atcacactga cctggcagcg ggatggggag gaccagacc aggacacgga gctcgtggag 120
accaggcctg caggggatgg aaccttccag aagtgggcgg ctgtggtggt gccttctgga 180
gaggagcaga gatacacctg ccatgtgcag catgagggtc tgcccaagcc cctcaccctg 240
agatggggagc tgtcttccca gccaccatc cccatcgtgg gentcattgc tggcctgggt 300
ctccttggac tgtgatcact ggagctgtgg tccctgccct gatttngtag gaagnaanaan 360
ctcnntattg aaaaaggagg gattttcact ccntgctgct aagcanttga caattgcccc 420
aagggg                                     425

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<210> 393

<211> 443

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (50)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (355)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (365)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (419)

<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (443)  
<223> n equals a,t,g, or c

<400> 393  
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ccactcagca tcttgctctg ggcagattca gactgagccc gccactccac ggtgatgggg 120  
ttctggaggc tggggtgctc catgtggcag gtgtagacgt ctccatgctg gggagtcatt 180  
tccagcatca ccaggatctg gaaggtccag tcaccgttcc taataagggg ggtggacaca 240  
acgccgggtt tctcctcctg gtcattccga atctgcccag agcaagatgc tgagtggcat 300  
tggaggcttc gtgctggggg catcttcctc gggctgggct tattatccat cacangatca 360  
gaaanggctc ctgcactgac tcctnagact attttaactg ggattgggtat cacttttcng 420  
taagcctgct tgtccctgcc can 443

<210> 394  
<211> 189  
<212> DNA  
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<220>  
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (75)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (110)  
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<222> (142)  
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<220>  
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<220>  
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<222> (182)  
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ctggncagat cagcnagggn tcgnccttgg ccccgggccc tccccaagtn cctgccccag 120  
gttccagccc ctgcccntgn tnccagcnat ggtatcagct ctggcccagg ccccgagnccc 180  
tntgcccag 189

<210> 395  
<211> 349  
<212> DNA  
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<220>  
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<220>  
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<222> (299)  
<223> n equals a,t,g, or c

<220>  
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<222> (315)  
<223> n equals a,t,g, or c

<220>  
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<222> (335)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (337)  
<223> n equals a,t,g, or c

<400> 395  
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gcaggtggac ttcaaggact tctacccggc catagcagtg aatgatgtgc gccaggctgc 120  
ccgcagcgcc gccagctaca tgctcttcga cccaaggac agcgtcatgc agcagaacct 180  
ggtgtattac cggttccacc gggctcgtg gggcctggaa gaggaggact tccagccccg 240  
ggaggaggcc atgctctacc acaaccagac cgccgagctg cgggantgct ggagttcanc 300  
cacatgtacc tgcanttaag atgatgaaat tggancnggg aaggaaaca 349

<210> 396  
<211> 304  
<212> DNA  
<213> Homo sapiens

<220>  
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<220>  
<221> misc feature  
<222> (236)  
<223> n equals a,t,g, or c

<220>  
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<220>

<221> misc feature

<222> (260)

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<220>

<221> misc feature

<222> (263)

<223> n equals a,t,g, or c

<400> 396

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cctgacaggc cctggggccaa gcccgaggac ccttctctcc tggaggatcc caggatcaag 60
gcgatcgag ccaagcacao taaaactaca gccaggtcc tgatccggtt ccccatgcag 120
aggaatgggg gtggatcccc aagtctgtga caccagaacg cattgctgag aactttaagg 180
tcttttgact ttgaactgag cagccaggat atgancacct tactcagcta caacangant 240
gaaggctctg ttgctgtttt agntgttcct cccacaagga ttacccttca taaaaatttt 300
ggaa                                     304
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<210> 397

<211> 349

<212> DNA

<213> Homo sapiens

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<222> (285)

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<222> (288)

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<222> (315)

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<220>



<221> misc feature  
<222> (318)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (345)  
<223> n equals a,t,g, or c

<400> 397  
tgtccaaggg catccgggac aacgagcggg gtggccgggc ccgagtgcac gtgtctgagg 60  
agggcactga gcccgagggc atgctccagg tgctggggcc caagccggct ctgcctgcag 120  
gtaccganga caccgccaag gaggatgcgg ccaaccgcaa nctggccaag ctctacaagg 180  
tctccaatgg tgcattggacc atgtccgtct ccctcctggc tgatgaaaac ccttccgcca 240  
aggggcctga aattcagaag actgcttcat cctggaccac gcaanatngg aaatctttgt 300  
cttgaaaggc aacangcnac acgaagaaaa gaaagggtgcc tccanacca 349

<210> 398  
<211> 638  
<212> DNA  
<213> Homo sapiens

<220>  
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<220>  
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<220>  
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<222> (302)  
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<222> (495)  
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<222> (563)  
<223> n equals a,t,g, or c

<220>  
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<222> (578)  
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<220>  
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 <222> (624)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (636)  
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<400> 398  
 tagcctcata nnggacaaan nggatcccg gtgacgnccg tctaaatatg gatccccggc 60  
 gcagattcgc acagggagac aggactcgat gacagacagg caggtctcgt gagggaacgg 120  
 gggccgggac ttcgtaagga gagacctggc cataagggac acctttgtga atgcctctcg 180  
 gaccctgtac agcagcagcc ccagagtcct aagcaacaac agtgacgcca acttggagct 240  
 catcaacacc tgggtggcca agaacaccaa caacaagatc agccggctgc tagacagtct 300  
 gncctccgat accgccttg tcctcctcaa tgctatccta cctgagtgcc aagtggaaga 360  
 caacatttga tcccaagaaa ccagaatgga nccctttcac ttcaaaaact cagttataaa 420  
 gtgcccata tgaatagcag aagtnccgtg gggccatttc attgaccaac tttgaagcca 480  
 aggtggggag tgcantctcc acaatctgag tttngatct ggnccccaga cctgaaacan 540  
 cgntttttaa catgggacan ggnctagccc ttctgttnaa aggcacatg gggaaaactgg 600  
 gatgtccaag tccagccaaa agtngttact tcccgnat 638

<210> 399  
 <211> 245  
 <212> DNA  
 <213> Homo sapiens

<220>  
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<220>  
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<220>  
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<222> (67)

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<222> (100)

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<222> (115)

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<222> (126)

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<222> (224)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (231)

<223> n equals a,t,g, or c

<400> 399

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tcggggntgg ggataacacc aaaacaaacc tggagagcan cctctcttac ccganggact 120  
tcaccnatgt ccaccaagcc ctgaagggn tcacaaccaa aggtgtcacc tcagtctctc 180

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aaatcttcca ntgccngaa ctggccataa gggacccttt gtgnaatgcc nctcggaccc 240
tgttc                                     245

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<210> 400
<211> 364
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c

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gggctagaca cgggagaata cttttgcacc cacaatgact cccgtggact ggagaccgat 120
gagcggaaac ggctctacat ctttgtgcc gaagctacat ctgcaaaacc accattgggg 180
acagggaggt ggattctgat gcctactatg tctacagact ccaggggtgag cccctttct 240
ggcctgatgc tcagcagagt gttcatccat caacgtctct gtggaacgcn tnnaggactg 300
tggtccgcca ggtggagaac atcaccttca ngtgcattgt ggatcgggna tgaggtgtca 360
attt                                     364

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<210> 401
<211> 409
<212> DNA
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<220>  
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<220>  
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<220>  
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 <222> (391)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (405)  
 <223> n equals a,t,g, or c

<400> 401  
 ttnagagccg gactaggacc agggccctgg gcctntccac actcccatg gagaagctgg 60  
 cggcctctac agagcccaaa gggcctcggc cggcctcggg ccgtgagagt gtccaggtgc 120  
 ccgatgacca agactttcgc agcttcgggt cagacgggct acctcatcca gagcacaggg 180  
 cccaagagct gcgtcatcac ctacctggcc caggtggacc ccaaaggctc cttacccaag 240  
 tgggtggtga ataaatcttc tcagttcctg gctcccaagg ccatgaagaa gatgtacaag 300  
 gcgtgcctca agtaccgccga gtggaacag aagcacctgc ctcacttcaa gccgtggctg 360  
 caccgcgagc agagcccgnt gccgagcctg ncgctgcgga gctgncggg 409

<210> 402  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (432)  
 <223> n equals a,t,g, or c

<400> 402  
 cccaagcagc tggaggctct gtgtgtggga gcagcgactg gaccagagc catgtggctg 60  
 tgccctctgg cctcaacct catcttgatg gcagcctctg gtgctgtgtg cgaagtgaag 120  
 gacgtttgtg ttggaagccc tggatatccc ggcactcctg gatccacagg cctgccaggc 180  
 agggacggga gagatggtgt caaaggagac cctggccctc caggcccat gggccacct 240  
 ggagaaatgc catgtcctcc tggaaatgat gggctgcctg gagccctgg tatccctgga 300  
 gagtgtggag agaaggggga gcctggcgag aggggccctc cagggcttcc agctcatcta 360  
 gatgaggagc tccaagccac actccacgac tttagacatc aaatcctgca gacaagggga 420  
 gccctcagtc tncaggg 437

<210> 403

<211> 203  
<212> DNA  
<213> Homo sapiens

<220>  
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<222> (143)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (152)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (161)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (163)  
<223> n equals a,t,g, or c

<220>  
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<222> (182)  
<223> n equals a,t,g, or c

<400> 403  
cacaacacag gtgtcgtgaa aactaccctt aaaagccaaa atgggaaagg aaaagactca 60  
tatcaacatt gtcgtcattg gacacgtaaa ttcgggcaag tccaccacta ctggccatct 120  
tatctatata tgcggtggct tcnacaaaaa ancctttgaa nantttgaaa aggaggctgc 180  
tnatatggga aagggtcct cca 203

<210> 404  
<211> 383  
<212> DNA  
<213> Homo sapiens

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (262)  
<223> n equals a,t,g, or c

<220>

<221> misc feature  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (299)  
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<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <223> n equals a,t,g, or c

<220>  
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 <222> (368)  
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 tgccgacaag gcatctgccg gcggctcagg agcccagagc cccagaaact gcagcatcat 120  
 gtaatctggg acctgccagg caggggtggg ggtggaggct tcctgcgctc tcctcacctc 180  
 atgccacccc cctgccctgc acgtcatggg agggggcttg aagccaanga aaaataaccc 240  
 ttgtgttttt ttcttctgta tntttttttc taagagaant attttctaca gtgggttttna 300  
 tantgaanga aaaacacaag caaaaaaaaaa aaaaaagggc ggccgctcta naggatccaa 360  
 agcttacnta cgcgtgcatg cga 383

<210> 405  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 <222> (21)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (23)



<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (172)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (173)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (208)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (268)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (298)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (384)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (405)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (406)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (416)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (428)

<223> n equals a,t,g, or c

<400> 405

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gaacttgtgc gagcctcaag tcactccaca gacctcatgg aagccatggc catgggcagc 120
gtggaggctt cttattaagt gtttagcagc agctttgata gttctgacgg anntgggcag 180
gtctgctcac caggtggcca gataccgncc acgtgcccc atcattgctg tggacccggg 240
aatccccaga cagttcgtca aggccanct tttaccgtgg gcattcttcc ctgtgctntt 300
gcaaggaccc cattccagga ggccttggtt ttaggacgtg ggaccttccg gtggaacttt 360
tgccatgatt tttgggaaag gccnagtttt tttcaagaag ggganntggt caattngttt 420
gaccgttngg gcc 433

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<210> 406

<211> 429

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (391)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (406)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (426)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (428)

<223> n equals a,t,g, or c

<400> 406

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tcaagtagat ttcttgatc atgttccct cacaacacac aactttgctc ggaagacgtt 120
cctgaagctt gccttctgtg acatctgtca gaaattcctg ctcaatggat ttcgatgtca 180
gacttgtggc tacaaatttc atgagcactg tagcaccaaa gtacctacta tgtgtgtgga 240

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ctggagtaac atcagacaac tcttattggt tccaaattcc actattggtg atagtggagt 300  
cccagcacta ccttctttga ctatgcgtcg tatgcgagag tctggtccaa ggatgcctgt 360  
aagttctcag cacagatatt ctacacctca ngccttcanc tttaanacct ccagtcacctc 420  
atctgnang 429

<210> 407

<211> 270

<212> DNA

<213> Homo sapiens

<220>

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<222> (56)

<223> n equals a,t,g, or c

<220>

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<222> (74)

<223> n equals a,t,g, or c

<220>

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<222> (134)

<223> n equals a,t,g, or c

<220>

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<222> (146)

<223> n equals a,t,g, or c

<220>

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<222> (148)

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<220>

<221> misc feature

<222> (207)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (215)

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<220>

<221> misc feature

<222> (220)

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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (251)  
<223> n equals a,t,g, or c

<400> 407  
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ccagggtcac caangtcctg ggcaggaccg gttctcaggg acagtgcacg caggtaatcg 120  
ggtgggggca tttngccgac tgccgncnac cttaaaccctg atgtgacctc taccctgccc 180  
taacccttgc cagccggaat ccggganccg attcncattn natcacaggg ttctgatggt 240  
tccctttaac natctgtatt ctggccccga 270

<210> 408  
<211> 655  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (214)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (268)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (295)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (404)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<220>  
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<222> (511)  
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<220>  
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<222> (517)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (568)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (572)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (610)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (633)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (654)  
<223> n equals a,t,g, or c

<400> 408  
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cggggggggtg tcagtacctg cgctgtggag tgaagtgaac cggatatggc agaacggcga 120  
cttcacgcgc gctctcaaga ccgtcaataa gatactacag atcaacaaag atgacgtaac 180  
tgccctgcat tgtaaagtgg tatgccttat ccanaatgga agtttcaagg aagctttgaa 240  
tgtcatcaat actcacacca aagtgttngc caataactct ctctcctttg aaaangcata 300

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ttgcgaatac aggctgaaac agaattgana atgccttgaa aaacaataga aagtgccac 360
ccagcagaca gacaaactga aaggaacttt atggacaatt nttnttccgt ttgggaaagc 420
ttttaataaa tgcttaacaa tgttttaaaa tttcttccga aactccccca ataattttaa 480
taaggaaaag gaaaacnacc tttccccntt nttgcantcc aaacattgga aaattggtcc 540
caaaaactgg cccccaaaag gcattaantt tntaaacttt tttttttttt ggccggccct 600
taacccccctn aatccccaaa ttaaattttg cncacctttc caaaaattgg gagna      655
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<210> 409

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (223)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (246)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (250)

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<220>

<221> misc feature

<222> (259)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (273)

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<220>

<221> misc feature

<222> (291)

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<222> (361)

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<220>

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<222> (364)

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<220>  
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<222> (367)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (372)  
<223> n equals a,t,g, or c

<400> 409  
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ggcatatgag ggacagatgg agtgagtcag tgacaggagc agcgactgga cccagagcca 120  
tgtggctgtg ccctctggcc ctcaacctca tcttgatggc agcctctggg gctgcgtgcg 180  
aagtgaagga cgtttgtgtt ggaagccctg gtatccccgg cantcctgga tcccacggcc 240  
tgccangcan ggaaggana aatggtgtca aangagacc tggecctcca nggcccattg 300  
gtccgccttg agaaacaaca tgtcctcctg ggaataatgg gctgcttgag ccctgggtgt 360  
nccnganaaa cnttga 376

<210> 410  
<211> 651  
<212> DNA  
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<220>  
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<220>  
<221> misc feature  
<222> (624)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (643)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (646)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (650)  
<223> n equals a,t,g, or c

<400> 410

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gaagggccac gaacactcaa tccagtttgc tgagatgaag ctgagaccaa gcaacttcag 120  
aatctttgaa ggcaggcgca aacgggcata aattccaggg accactgggt gagagaggaa 180  
taaggcccag agcgaggaaa ggattttacc aaagcatcaa tacaaccagc ccaaccatcg 240  
gtccacacct gggcattttg tgagagtcaa agctgaccat ggatccctgg ggccaacggc 300  
aacagcatgg gcctcacctc ctctgtgatt tctttctttg caccaaagac atcagtctcc 360  
aacatgtttc tgttttggtg gttgattcag caaaaatctc cagtgacaac atcgcaatag 420  
ttttttactt ctcttaggtg gctctgggaa tgggagaagg gtaggatgtc aggggtagtt 480  
tggtttagaa ccagccgtat ttacatgaac tggataatta atggcattat tttggtagca 540  
aagattaaaag gggcattgga agccatccct tttttacatt tnatccacag aaaccagaaa 600  
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<210> 411

<211> 392

<212> DNA

<213> Homo sapiens

<220>

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<220>

<221> misc feature

<222> (210)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (220)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (354)

<223> n equals a,t,g, or c

<220>

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<222> (355)

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<220>

<221> misc feature

<222> (385)

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<220>

<221> misc feature

<222> (388)

<223> n equals a,t,g, or c



<220>  
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<222> (391)  
<223> n equals a,t,g, or c

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cccaggccga accggtgcag ttcaaggact gcggttctgt ggatggagtt ataaaggaag 120  
tgaatgtgag cccatgcccc acccaaccct gccagctgag caaaggacag tcttacagcg 180  
tcaatgtcac cttcaccanc aatattcaan ctaaaagcan caaggccgtg gtgcatggca 240  
tcctgatggg cgtcccagtt ccctttccca ttccctgagcc tgatggttgt aagagtggaa 300  
ttaactgccc tatccaaaaa gacaagacct atagctacct gaataaacta ccanngaaaa 360  
gcgaatatcc ctctataaaa ctgngngngg na 392

<210> 412  
<211> 645  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (443)  
<223> n equals a,t,g, or c

<220>  
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<222> (477)  
<223> n equals a,t,g, or c

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<222> (567)  
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<400> 412

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cggatgacga gaagtatctg tggaaggacc tgaccctgga ccaggcctat agctatgctg 120
tggaagaatgc caaggacatc atcgccctgtg gctttgacat caacaagact ttcataattct 180
ctgacctgga ctacatgggg atgagctcag gtttctacaa aaatgtggtg aagattcaaa 240
agcatgttac cttcaaccaa gtgaaaggca ttttcggctt cactgacagc gactgcattg 300
ggaagatcag ttttcctgcc atccaggctg ctccctcctt cagcaactca ttcccacaga 360
tcttccgaga caggacggat atccagtgcc ttatcccatg tgccattgac caggatcctt 420
actttagaat gacaagggac gtngcccccga ggatcggtta tcctaaacca gccctgntga 480
ctccaccttc ttcccagccc tgcanggcgc ccagaccaa atgagtgcc gcgaccccaa 540
ctcctccatc ttcctnaccg acacggncaa gcagatcaaa accaaggtca ataagcatgc 600
gttttctgga nggagagaca ccatcgagga gcacaggcag tttgg 645
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<210> 413

<211> 540

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

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<222> (186)

<223> n equals a,t,g, or c

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<222> (240)

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<220>

<221> misc feature

<222> (370)

<223> n equals a,t,g, or c

<220>  
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<222> (374)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (385)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (408)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (417)  
<223> n equals a,t,g, or c

<220>  
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<222> (443)  
<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (461)  
<223> n equals a,t,g, or c

<220>  
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<222> (479)  
<223> n equals a,t,g, or c

<220>  
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<222> (480)  
<223> n equals a,t,g, or c

<220>  
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<222> (496)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (533)  
<223> n equals a,t,g, or c

<400> 413  
ctcgnngnang gttcggagtc ccgattttct cctgctgctg tggcccggac atggcgactc 60  
ccggccctgt gattccggag tcccctttga accatcgaag cctccagtca ttgaggggct 120  
gagcccaactg tttacaggaa tccagagagt ttcaaggaaa agttcgttcg caagaccgcg 180  
gagaanccgg tggtaacctat aggttgccctg gccacggcgg ccgcccctcac ctacggcctn 240  
tactccttcc accggggggca acagccagcg ctcttcagct catgatgcgc acccggtatcg 300  
ccgcccaggt ttcaagggtc gcagccatct tgctgggtct ggggtgtcat gctatgnaat 360  
tttcgaaccn taanccaggt ttggntttga aaagtncgca gaaatggntt ccaaaancca 420  
gggagcaaac aatgggccct acntngggat ttattccctc ntttcttttg aaaggcccn 480  
ttttcgttgg ggaagnaatt gaacctttgt gtaatgttaa cgaaaatttt ttnaaaatcc 540

<210> 414  
<211> 90  
<212> DNA  
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<220>  
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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<223> n equals a,t,g, or c

<220>  
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<222> (79)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (88)  
<223> n equals a,t,g, or c

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ctcgtcgn tn cgagtttttt tttttttttt tttttttttt ttttttttaa 60  
aaaaanaaaa aaaaaaaang gggaaaang 90

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gtttaataaaa aatcatggaa agactcttaa tgcagactct tcttaagtgt taatagggat 180
tttttcagct tatttttggtt gcagtttcca atttttaaaa atggttgagg taatctttcc 240
caccttccca aaccttaatt cttggtagat ggcattagtg ttggaaccaa tgctttcntc 300
atgtcttcaa ttcttttgta tatggcnttc ctttncagat gtatttaaac aaacaaaaaac 360
cctttaaaaa aaaaaaaaaa aaccgggggg gggggggccc gnaaccatt ccccccaaaa 420
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 anctctagca tcaccagtat tagaggcacc ggctngccca gtggacacat gtttaacggg 180  
 ccgcggttac cctaaccgtg gcaaaggtta gcataatcan tgttccttaa ttangggacc 240  
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 gtcatatgag actggtagag acaagnnttg tagtgaagta nngtngcant aatttctgta 180  
 cctgatcaag tttattgcag cttttctttt cctatttctn ttntttangg gttantntna 240  
 acaaatggca atgagtagaa aagttaacat gaagatttta gaaggagaga acttacatga 300  
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 cagagagagg cagacttcgg ggaagccctg actgtncaga gctaaggaca cagtggagat 180  
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 gctccatcct gaggtccac ttggtctgtg agatgctaga actccctttc aacagaattc 180  
 acttggtggt attgggactg gaggcaccct tagccacttc attcctctga tgggccctga 240  
 ctcttcccca taatcactga ccagccttga cactccnttg caaatatttc agcactgaac 300  
 ccaggnagca ntcttagcct tggttcgac atgagatgga gcctcttatt nccatctggt 360  
 ccagttcctt aattacagat ggnagnatta gggtttgggt agaagncctc aannnaaaaa 420  
 agggtgctt ctggtcctna gtttttttg naaccagtgc attaggtgga atctggcaga 480  
 tatnnagagn gagatttggg gagcttat 508

<210> 421  
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ctgctggccc ttnaaccnca tcttgatatng gcagnttctg gtgctgcgtg cgaatnnaag 180  
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 antacaccca gatggcctga agcaactgaa gatccacaaa agaagtgaaa atagccagtt 120  
 cctgccttaa ctgatgacat tccaccattg tgaatttggt cctgccccac cctaactgat 180  
 caattgacct tgtggacaat acaccttccc cacccttgag aagggtgcttt gtaatatnt 240  
 nccccccac cccacgggcc gaaccccnngg naccntttga ggaaggtntt ttggtaatat 300  
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 tttttagggg gaaaaataaa tatatgctgt agtggccaca aataggccta tgatttanct 120  
 ggcaggccag gttttctcaa gagcaaaatc accctctggc cccttggcag gtaaggcctc 180  
 ccggtcagca ttatcctgcc agacctcggg gaggatacct gggagacaga agcctctgca 240  
 cctactgtgc agaactctcc acttcccca cctccccag gtgggcaggg cggagggagc 300  
 ctcagcctcc ttagactgac ccctcaggcc cctaggctgg ggggttgtaa ataacagcag 360  
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gggagtcacc caggaccggt gcagtcgcct tccccagct cctaaggctc ccggccttcc 120
ctgctgaaac agcaagacca gtgggttggt gtgggaggcc tgggcttcaa accacctctg 180
cnatcacctg gctgtnggtc cccaagcagg acatacacac agtccctctc tngccctcat 240
cctcctncaa gtgnaaagga aaagccaagt taaaanggct cttgggacca tggttancna 300
gctttttccc tnnaccctng gccttgccaa nngccagggt aaaaaaaact taagttccaa 360
aacggccttt taacgccttc ctcggaataa cttccactgg tggaccaagg gccccagcct 420
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cccacngtt cgagacagga aaaaaagcaa cttttccaac atacaattta cttttaataa 60  
agtatganta tttcattttg agaacattcc ctggaattgc cacataattc attaaaaaca 120  
tttttttaag caacacttgg gaacagtgtt tacttttaa ccttaatggc cttaattaat 180  
tctnagattc ctgccccatc acttacagaa ccaattcact tttagagtgc taaaaggaaa 240  
cgatagccta gcttttctaaa gccacgtgt gtccctcaat tacagagggt aggaatgggt 300  
ataactctta actgtggcaa agcagagtgg aaattncaat ttcataggan taaacaactg 360  
ctgggggnat attccgtgcc caggnaaagg gaaaattttc tgggcaaata ttttgtnc 419

<210> 426  
<211> 407  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (229)  
<223> n equals a,t,g, or c

<220>

<221> misc feature  
 <222> (240)  
 <223> n equals a,t,g, or c

<220>  
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 <222> (336)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (357)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (400)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (406)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (407)  
 <223> n equals a,t,g, or c

<400> 426  
 gcttactacc agacaacctt agccaaacca tttacccaaa taaagtatag gcgatagaaa 60  
 ttgaaacctg gcgcaataga tatagtaccg caagggaag atgaaaaatt ataaccaagc 120  
 ataatatagc aaggactaac ccctatacct tctgcataat gaattaacta gaaataactt 180  
 tgcaaggaga gccaaagcta agacccccga aaccagacga gctacctgng aaacagctgn 240  
 aagagcacac ccgctctatgt agcaaaatag tggaagatt tatagggtga ggcgacaaac 300  
 ctaccgagcc tgggtgatagc tggttgtcca agatanaatc ttagttcact ttaaatntgc 360  
 ccacagaacc ctctaaatcc ccttgtaaat ttaactgttn aaaaann 407

<210> 427  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (315)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (344)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (356)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (358)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (364)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 427

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acccacgcgt ccgctcaagt atagtgagaa ctcaatcttg aataacattt agaaagaatc 60
tcgctatact tgagactaga tgacaaataa atgttattca agattgagtt ctactagtgt 120
tttttttaat cctaaaaaag taatgttttg attttgtgac agtcaaaagg acgtgcaaaa 180
gtctagcctt gcccgagctt tccttacaat cagagcccct ctcaccttgt aaagtgtgaa 240
tcgcccttcc cttttgtaca gaagatgaac tgtattttgc attttgtcta cttgtaagtgt 300
aatgtaacat actgncaatt ttctttgttt gaatatagaa tggnaacact acacgngnac 360
atnccagag cctggggtat attgccaatg aactttttgc aagcacactt gtaaccaaatt 420
gng                                         423

```

<210> 428

<211> 378

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<400> 428

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gcggaggttt cagnntagaa ggtgatgtca gctccagctc ccctctgtcg gtggtggggc 60
ctcaccttga agaggggaagt ctcaatatta ggctaagcta tttgggaaag ttctccccac 120
cgccccctgta cgcgtcatcc tagccccct taggaaagga gttagggtct cagtgcctcc 180

```



415

```
agccacaccc cctgccttcc ccagcttgcc catttccctg cccaaggcc cagagctccc 240
cccagactgg agagcaagcc cagcccagcc tcggcataga ccccttctg gtccgcccgt 300
ggctcgattc ccgggattca ttctcagcc tctgctntc cttttatcc caataagtta 360
ttgctactgc tgtgaagg                                     378
```

&lt;210&gt; 429

&lt;211&gt; 92

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (23)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (70)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (75)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (76)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (77)

&lt;223&gt; n equals a,t,g, or c

&lt;400&gt; 429

```
ggcacagtgg cagtgtagcg agnaaagggtt ttgcctcct gtttcagcgg tgacggctct 60
tgggttttcn cgggnnngct ttttaatttt ag                                     92
```

&lt;210&gt; 430

&lt;211&gt; 410

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc feature

&lt;222&gt; (343)

&lt;223&gt; n equals a,t,g, or c

&lt;220&gt;

&lt;221&gt; misc feature

<222> (368)

<223> n equals a,t,g, or c

<400> 430

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gcaaaacctt aaatctccag gcttttttaa gcacaaaata taaataaaaag ctgggaaagt 60
aaacccaaaat tcttcagatt gttcctcatg aatatccccc ttcctctgca attctccaga 120
gtggtaacag atgggtagag gcagctcagg tgaattaccc agcttgctc tcaattcatt 180
cctcctcttc ctctcaaagg ctgaaggcag ggcctttcca gtcctcacia cctgtccttc 240
acctagtccc tcctgaccca gggatggagg ctttgagtcc cacagtgtgg tgatacagag 300
cactagtgtg cactgcctgg ctttatttaa aggaatgcag tangcttcct ctgtagagct 360
ctgaaaangt tgactatata gaagtcttgt atgtttttac ttgggtaaga 410
```

<210> 431

<211> 611

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (327)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (349)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (396)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (400)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (494)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (525)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (536)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (563)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (583)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (605)  
 <223> n equals a,t,g, or c

<400> 431  
 gcaaacagat aacagaagat acagttgagt ttggctctta gagaaatctg gagaactata 60  
 cctgcttcag tgaaataatt acagaatata cttagaaagg caaagtacat tgtaaaataa 120  
 agttgagctt agtttttttt aaaaaaaaaa acaaagcaac aaattaacta gatacagaat 180  
 aatggagAAC aagttgttaa aacatttaatt attatatagg atattgctaa ttgtgtatat 240  
 gttggtttta ttaataatat gtactaagaa tgccttatt cttgnggtta aaaacctgcc 300  
 taaattaaat tgggcttcaa tcaactgnaac ctgattcatc ctgggatgna aaccattcga 360  
 agtcagctaa ttggactttt atggctctat cttttncttn agtgaagaac cctattttaa 420  
 actgggtcat caattggctg gtctaacaag gatagtcctc aggttcaatt tnctgggccc 480  
 tngngtaagt tggnaacaaa tcataatgga ttaattaaaa ggtnnaccat cattgnatta 540  
 cagcggttat tataccgggg canaattcct tacttgcccc agnaatccta attccttggg 600  
 ggggncttgg a 611

<210> 432  
 <211> 291  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature

<222> (226)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (258)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (266)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (280)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (287)  
 <223> n equals a,t,g, or c

<400> 432  
 ggcagagttt ttacagcaaa aactgctcaa agccatttaa attatatcct cattttaaaa 60  
 gttacatttg caaatatttc tccctatgaa taatgtagtc gatagtgtgc actctttctc 120  
 tctctctctc tctctctcac acacacacac acacacacac acacacacac acagacacgg 180  
 caccattctg cctggggcac tggaacacat tcctgggggt caccgntggg cagagtcact 240  
 aggaggttac ctgagtanc tggggnggcc taatgtctcn tgggggnntt t 291

<210> 433  
 <211> 124  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (112)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (114)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (119)  
 <223> n equals a,t,g, or c

<220>

<221> misc feature  
<222> (121)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (122)  
<223> n equals a,t,g, or c

<400> 433  
ctcgtgccga attcggcacg aggagagaga gagagagaga gagagagaga gagagagaga 60  
gagagagaga gagagagaga gagagagaga gagagagaga gagagagaga gngngggcna 120  
nnag 124

<210> 434  
<211> 382  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (67)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (86)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (106)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (116)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (122)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (172)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (191)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (228)  
<223> n equals a,t,g, or c

<220>  
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<222> (254)  
<223> n equals a,t,g, or c

<220>  
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<222> (267)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (269)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (299)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (321)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (328)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (341)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (373)  
<223> n equals a,t,g, or c

<400> 434  
cgcggtccgct tgttttaaaa aaatgcacaa ttacttccc aaaaaagttg ttacttgcct 60  
tttcaanttg ttgacaaaca cacatntgat attctcttat atgtnttagt aatgtnacgt 120

```

anaaaactcaa gccttttttat tctttgtgat taaatcctgt tttaaaatgt cncaaaacag 180
gaaccagcat nctaattgga tttactatat cgagatatgg ttcaaantngg actactaaaa 240
ttcattgaac actnaaacta tgaaacnant actttttata ttagtgaaga catgggatnt 300
aacttatgga aaatccaagt ngcagganag taatttttgt ntactttttt aaccagactg 360
gaatgggtga agnactagtg cg                                     382

```

<210> 435

<211> 323

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (200)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (209)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (249)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (270)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (271)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (323)

<223> n equals a,t,g, or c

<400> 435

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gccgaggtcc ccgcgccaga gacgcagccg cgctccacc acccacaccc accgcgccct 60
cgttcgctc ttctccggga gccagtccgc gccaccgccg ccgcccaggc catcgccacc 120
ctccgcagcc atgtccacca ggtccgtgtc ctcgctctcc taccgcagga tgttcggcgg 180
cccgggcacc gcgagccggn cgagctcanc gggagctacg tgactacgtc acccgcacct 240

```

422

acagcctgng cagcgcgctg agccccaach ncagccgcac ctctaccctc gntccccgggc 300  
ggcgtgtatg ccacgcgctc ctn 323

<210> 436

<211> 503

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (313)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (403)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (452)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (457)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (469)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<400> 436

gaattttgaa tgtatttttta aattttatttt ttcaaaaataa tgacattagt aaaaattttta 60  
catagcctgt attgaattca cacattcaaa tgaggcttta ccagtaatga tggggattaa 120  
tacagagcta gtgtttggca tttgacttta tctcaaatga gctaactgct caatgaatta 180  
cagaagactc atactctttt tatttttttcc tggaaattaa aaaagaaaag ctttactaaa 240  
tattgacata tatattttact ccaaatttta catttagtga aataagaata tctctagtag 300  
ctcagttaac atncaaccag gaaagcttca aaaagatgat tctgaaaatg gcaggcaaaa 360  
tttctttttta ttgtaggcaa ttcttaaact ggaaatttgg cntatgcat aataagtcac 420



423

gtgggtaaaa catccacctt gcagttaggg tncagnatc ctaaccttnc taatttattt 480  
ctnttaggcc aantggacca ttt 503

<210> 437  
<211> 77  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (27)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (70)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (71)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (73)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (77)  
<223> n equals a,t,g, or c

<400> 437  
ggcacgagga gagagagaga gagaganaga gagagagaga gagagagaga gagagagaga 60  
gagagagagn ntncgcn 77

<210> 438  
<211> 424  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (281)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (288)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (373)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (374)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (387)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (392)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (394)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (402)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (417)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (420)  
<223> n equals a,t,g, or c

<400> 438  
attcaggggc tgacacttca aggtgacaga aggaccagcc cttgagggag aacttatggc 60  
cacagcccat ccatagtaac tgacatgatt agcagaagaa aggaacattt aggggcaagc 120  
aggcgctgtg ctatcatgat ggaatttcat atctacagat agagagtttg ttgtgtacag 180  
acttgttgtg actttgacgc ttgcgaacta gagatgtgca attgatttct tttcttcctg 240  
gctttttaac tcccctgttt caatcactgt cctcccacac nagggaanga cagaaaggaa 300  
attggccttc ctttttttcc ttggccccct tcccccaagg cctttaaact tttggaaccc 360  
caaggaaaac tgnnttgga aaaccnttt cncnggggtt gnaaaaaatt gggaaanccn 420  
ccca 424

425

<210> 439  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature  
 <222> (94)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (316)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (357)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (378)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (380)  
 <223> n equals a,t,g, or c

<220>  
 <221> misc feature  
 <222> (381)  
 <223> n equals a,t,g, or c

<400> 439  
 gccagccca gaacaggggt ggattcccca acctcaacct cttttcttct ctgctcccaa 60  
 accatgtcag gaccaccttc ctctagagct cggagcccg gagggctctc acccactcct 120  
 actccagtat cagctggcac gggctccttc ctgagagcaa aggtcaagga cccctctgt 180  
 gaaggctcag cagaggtggg atcccacgcc cctcccggc ccctccctgc cctccattca 240  
 gggagaaacc tctccttccc gtgtgagaag ggccagaggg tccaggcatc ccaagtccag 300  
 cgtgaagggc cacagnccct cttggctgcc aagcacgcag atcccatgga catttgngga 360  
 aagggtcct tgctgcn gn 382

<210> 440  
 <211> 231  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc feature

<222> (143)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (180)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (186)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (211)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (218)  
<223> n equals a,t,g, or c

<400> 440  
gaagaaatca aaacaagatc acaagaatac tgaaaaatga agcctaaaat gaagtattca 60  
accaacaaaa ttccacagc aaagtggag aacacagcaa gcaaagcctt gtgtttcaag 120  
ctgggaaaat cccaacagaa ggncaaagaa gtttgcccca tgtactttat gaagctccgn 180  
tctggncctta tgataaaaaa ggaggcctgg nactttanga gagaaaccac c 231

<210> 441  
<211> 86  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc feature  
<222> (69)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (73)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature  
<222> (78)  
<223> n equals a,t,g, or c

<220>  
<221> misc feature

<222> (84)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (85)

<223> n equals a,t,g, or c

<400> 441

ggggcggttg tgccgcctcc attgttcgtg ttttaaggcg ccatgagggg tgacagaggc 60  
ctgtggtcnt ggnggacnct ttgnnt 86

<210> 442

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (499)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<400> 442

caaaccact ccaccttact accagacaac cttagccaaa ccatttacc aaataaagta 60  
taggcgatag aaaattgaaa cctggcgcaa tagatatagt accgcaagg aaagatgaaa 120  
aattataacc aagcataata tagcaaggac taaccctat accttctgca taatgaatta 180  
actagaaata actttgcaag gagagccaaa gctaagacc ccgaaaccag acgagctacc 240  
taagaacagc taaaagagca caccctcta tgtagcaaaa tagtggaag atttataggt 300  
agaggcgaca aacctaccga gcctggtgat agctggttgt ccaagataga atcttagttc 360  
aactttaaat ttgccacag aacctctaa atcccttgt aaatttact gttagtccaa 420  
agaagaacag ctctttggac actaggaaaa aacttgtaga gagagtaaaa anttaacacc 480  
catagtaggc taaaagcanc nccaatttaa gaaagcggtt aagctcacac ccactaccta 540  
a 541

<210> 443

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (312)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (375)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (387)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (390)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<400> 443

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cgacgagggtt ttccagggtta catgtataca gatttagcca cgatatatga acgcgctggg 60
cgagtgggaag ggagaaacgg ctcgattact caaatcccta ttctaaccat gcctaatagat 120
gatatcactc accccatccc agacttgact ggctacatta cagaggggca gatctatgtg 180
gacagacagc tgcacaacag acagatttat ccacctatca atgtgctgcc ctcactatca 240
acggttaatg aagtctgcta ttggagaagg ggatgaccag gaaggatcat gccgatgtat 300
ctaaccagct tnattgcctg ctatgctatt ggaaagggat gtgcaagcca tgaaagcttg 360
cgttggagaa aaaancctta cttaaangan cntctctact tggaaatc 408
```

<210> 444

<211> 323

<212> PRT

<213> Homo sapiens

<400> 444

```
Arg Lys Lys Met Ala Leu Thr Ser Phe Leu Pro Ala Pro Thr Gln Leu
  1             5             10             15
```

```
Ser Gln Asp Gln Leu Glu Ala Glu Glu Lys Ala Arg Ser Gln Arg Ser
      20             25             30
```

```
Arg Gln Thr Ser Leu Val Ser Ser Arg Arg Glu Pro Pro Pro Tyr Gly
      35             40             45
```

```
Tyr Arg Lys Gly Trp Ile Pro Arg Leu Leu Glu Asp Phe Gly Asp Gly
      50             55             60
```

```
Gly Ala Phe Pro Glu Ile His Val Ala Gln Tyr Pro Leu Asp Met Gly
```

65		70		75		80
Arg Lys Lys Lys Met Ser Asn Ala Leu Ala Ile Gln Val Asp Ser Glu						
	85		90		95	
Gly Lys Ile Lys Tyr Asp Ala Ile Ala Arg Gln Gly Gln Ser Lys Asp						
	100		105		110	
Lys Val Ile Tyr Ser Lys Tyr Thr Asp Leu Val Pro Lys Glu Val Met						
	115		120		125	
Asn Ala Asp Asp Pro Asp Leu Gln Arg Pro Asp Glu Glu Ala Ile Lys						
	130		135		140	
Glu Ile Thr Glu Lys Thr Arg Val Ala Leu Glu Lys Ser Val Ser Gln						
145		150		155		160
Lys Val Ala Ala Ala Met Pro Val Arg Ala Ala Asp Lys Leu Ala Pro						
	165		170		175	
Ala Gln Tyr Ile Arg Tyr Thr Pro Ser Gln Gln Gly Val Ala Phe Asn						
	180		185		190	
Ser Gly Ala Lys Gln Arg Val Ile Arg Met Val Glu Met Gln Lys Asp						
	195		200		205	
Pro Met Glu Pro Pro Arg Phe Lys Ile Asn Lys Lys Ile Pro Arg Gly						
	210		215		220	
Pro Pro Ser Pro Pro Ala Pro Val Met His Ser Pro Ser Arg Lys Met						
225		230		235		240
Thr Val Lys Glu Gln Gln Glu Trp Lys Ile Pro Pro Cys Ile Ser Asn						
	245		250		255	
Trp Lys Asn Ala Lys Gly Tyr Thr Ile Pro Leu Asp Lys Arg Leu Ala						
	260		265		270	
Ala Asp Gly Arg Gly Leu Gln Thr Val His Ile Asn Glu Asn Phe Ala						
	275		280		285	
Lys Leu Ala Glu Ala Leu Tyr Ile Ala Asp Arg Lys Ala Arg Glu Ala						
	290		295		300	
Val Gly Asn Ala Cys Pro Ser Arg Glu Lys Asn Gly Ser Glu Arg Lys						
305		310		315		320
Gly Lys Thr						

<210> 445  
 <211> 640  
 <212> PRT  
 <213> Homo sapiens

<400> 445

Trp	Val	Arg	Pro	Thr	Arg	Pro	Thr	Leu	Thr	Ser	Ile	Cys	Glu	Lys	Val
1				5				10						15	
Ile	Val	Pro	Asn	Met	Glu	Phe	Arg	Ala	Ala	Asp	Glu	Glu	Ala	Phe	Glu
			20					25					30		
Asp	Asn	Ser	Glu	Glu	Tyr	Ile	Arg	Arg	Asp	Leu	Glu	Gly	Ser	Asp	Ile
		35					40					45			
Asp	Thr	Arg	Arg	Arg	Ala	Ala	Cys	Asp	Leu	Val	Arg	Gly	Leu	Cys	Lys
	50					55					60				
Phe	Phe	Glu	Gly	Pro	Val	Thr	Gly	Ile	Phe	Ser	Gly	Tyr	Val	Asn	Ser
65					70				75					80	
Met	Leu	Gln	Glu	Tyr	Ala	Lys	Asn	Pro	Ser	Val	Asn	Trp	Lys	His	Lys
			85				90							95	
Asp	Ala	Ala	Ile	Tyr	Leu	Val	Thr	Ser	Leu	Ala	Ser	Lys	Ala	Gln	Thr
			100					105					110		
Gln	Lys	His	Gly	Ile	Thr	Gln	Ala	Asn	Glu	Leu	Val	Asn	Leu	Thr	Glu
	115						120					125			
Phe	Phe	Val	Asn	His	Ile	Leu	Pro	Asp	Leu	Lys	Ser	Ala	Asn	Val	Asn
	130					135					140				
Glu	Phe	Pro	Val	Leu	Lys	Ala	Asp	Gly	Ile	Lys	Tyr	Ile	Met	Ile	Phe
145					150				155					160	
Arg	Asn	Gln	Val	Pro	Lys	Glu	His	Leu	Leu	Val	Ser	Ile	Pro	Leu	Leu
			165					170						175	
Ile	Asn	His	Leu	Gln	Ala	Glu	Ser	Ile	Val	Val	His	Thr	Tyr	Ala	Ala
		180						185					190		
His	Ala	Leu	Glu	Arg	Leu	Phe	Thr	Met	Arg	Gly	Pro	Asn	Asn	Ala	Thr
	195						200					205			
Leu	Phe	Thr	Ala	Ala	Glu	Ile	Ala	Pro	Phe	Val	Glu	Ile	Leu	Leu	Thr
	210					215					220				
Asn	Leu	Phe	Lys	Ala	Leu	Thr	Leu	Pro	Gly	Ser	Ser	Glu	Asn	Glu	Tyr
225					230					235				240	



Ile Met Lys Ala Ile Met Arg Ser Phe Ser Leu Leu Gln Glu Ala Ile  
245 250 255

Ile Pro Tyr Ile Pro Thr Leu Ile Thr Gln Leu Thr Gln Lys Leu Leu  
260 265 270

Ala Val Ser Lys Asn Pro Ser Lys Pro His Phe Asn His Tyr Met Phe  
275 280 285

Glu Ala Ile Cys Leu Ser Ile Arg Ile Thr Cys Lys Ala Asn Pro Ala  
290 295 300

Ala Val Val Asn Phe Glu Glu Ala Leu Phe Leu Val Phe Thr Glu Ile  
305 310 315 320

Leu Gln Asn Asp Val Gln Glu Phe Ile Pro Tyr Val Phe Gln Val Met  
325 330 335

Ser Leu Leu Leu Glu Thr His Lys Asn Asp Ile Pro Ser Ser Tyr Met  
340 345 350

Ala Leu Phe Pro His Leu Leu Gln Pro Val Leu Trp Glu Arg Thr Gly  
355 360 365

Asn Ile Pro Ala Leu Val Arg Leu Leu Gln Ala Phe Leu Glu Arg Gly  
370 375 380

Ser Asn Thr Ile Ala Ser Ala Ala Ala Asp Lys Ile Pro Gly Leu Leu  
385 390 395 400

Gly Val Phe Gln Lys Leu Ile Ala Ser Lys Ala Asn Asp His Gln Gly  
405 410 415

Phe Tyr Leu Leu Asn Ser Ile Ile Glu His Met Pro Pro Glu Ser Val  
420 425 430

Asp Gln Tyr Arg Lys Gln Ile Phe Ile Leu Leu Phe Gln Arg Leu Gln  
435 440 445

Asn Ser Lys Thr Thr Lys Phe Ile Lys Ser Phe Leu Val Phe Ile Asn  
450 455 460

Leu Tyr Cys Ile Lys Tyr Gly Ala Leu Ala Leu Gln Glu Ile Phe Asp  
465 470 475 480

Gly Ile Gln Pro Lys Met Phe Gly Met Val Leu Glu Lys Ile Ile Ile  
485 490 495

Pro Glu Ile Gln Lys Val Ser Gly Asn Val Glu Lys Lys Ile Cys Ala  
500 505 510

Val Gly Ile Thr Lys Leu Leu Thr Glu Cys Pro Pro Met Met Asp Thr  
           515                                  520                                  525  
 Glu Tyr Thr Lys Leu Trp Thr Pro Leu Leu Gln Ser Leu Ile Gly Leu  
           530                                  535                                  540  
 Phe Glu Leu Pro Glu Asp Asp Thr Ile Pro Asp Glu Glu His Phe Ile  
           545                                  550                                  555                                  560  
 Asp Ile Glu Asp Thr Pro Gly Tyr Gln Thr Ala Phe Ser Gln Leu Ala  
                                   565                                  570                                  575  
 Phe Ala Gly Lys Lys Glu His Asp Pro Val Gly Gln Met Val Asn Asn  
                                   580                                  585                                  590  
 Pro Lys Ile His Leu Ala Gln Ser Leu His Lys Leu Ser Thr Ala Cys  
           595                                  600                                  605  
 Pro Gly Arg Val Pro Ser Met Val Ser Thr Ser Leu Asn Ala Glu Ala  
           610                                  615                                  620  
 Leu Gln Tyr Leu Gln Gly Tyr Leu Gln Ala Ala Ser Val Thr Leu Leu  
           625                                  630                                  635                                  640

<210> 446  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

<400> 446  
 Leu Glu Val Ala Ile Cys Cys Gln Gly Cys Gly Val Ala Pro Asp Phe  
   1                                  5                                  10                                  15  
 Thr Ala Val Pro Gly Thr Trp Thr Pro Arg Leu Gly Val Gly Val Cys  
           20                                  25                                  30  
 Phe Leu Leu Leu Ala Phe Thr Glu Ala Thr Gly Val Gly Gly Gly Gly  
           35                                  40                                  45  
 Trp Glu Ser Leu Lys Arg Asp Cys His Gly Ser Phe Pro Thr Arg Ala  
           50                                  55                                  60  
 Thr Ser Ser His Leu Thr Asp Ala Arg Pro Lys Gly Leu Gln Pro Val  
           65                                  70                                  75                                  80

Ala Ile Pro Cys Phe Pro Arg Gln Pro Ala Pro Ala Ala Ile Pro Arg  
85 90 95  
Glu Val Ala Gln Glu Gly Ala Trp Pro Arg Ile Arg Asn Trp His Thr  
100 105 110  
Ala Lys Ser Pro Ala Leu Pro Leu Val Asp Ser Ile Val Leu Glu Trp  
115 120 125  
Pro Arg Ser Asp Glu Leu Cys Ala Cys Pro Trp Gln Trp Gln Ala Val  
130 135 140  
Ser Tyr Gly His Leu Gly Arg Thr Trp Asn Leu Ala Ser  
145 150 155

<210> 447  
<211> 81  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 447  
Ala Glu Phe Cys Leu Trp Ala Ser Pro Phe Pro Ala Asn Ser Thr Asp  
1 5 10 15  
Pro Val Lys Ala Ala Gln Phe Glu Pro Pro Gly Arg Gln Met Ile Ala  
20 25 30  
Ile Arg Lys Arg Gln Xaa Glu Glu Thr Asn Asn Asp Tyr Glu Thr Ala  
35 40 45  
Asp Gly Gly Tyr Met Thr Leu Asn Pro Arg Ala Pro Thr Asp Asp Asp  
50 55 60  
Lys Asn Ile Tyr Leu Thr Leu Pro Pro Asn Asp His Val Asn Ser Asn  
65 70 75 80

Asn

<210> 448  
<211> 340  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 448

Cys	Val	Trp	Val	Leu	Val	Cys	Arg	Pro	Ser	Gly	Pro	Gly	His	Asp	Ser
1				5					10					15	
Ile	Met	Tyr	His	Asn	Ser	Ser	Gln	Lys	Arg	His	Trp	Thr	Phe	Ser	Ser
			20					25					30		
Glu	Glu	Gln	Leu	Ala	Arg	Leu	Arg	Ala	Asp	Ala	Asn	Arg	Lys	Phe	Arg
		35					40					45			
Cys	Lys	Ala	Val	Ala	Asn	Gly	Lys	Val	Leu	Pro	Asn	Asp	Pro	Val	Phe
	50					55					60				
Leu	Glu	Pro	His	Glu	Glu	Met	Thr	Leu	Cys	Lys	Tyr	Tyr	Glu	Lys	Arg
65					70					75					80
Leu	Leu	Glu	Phe	Cys	Ser	Val	Phe	Lys	Pro	Ala	Met	Pro	Arg	Ser	Val
				85					90					95	
Val	Gly	Thr	Ala	Cys	Met	Tyr	Phe	Lys	Arg	Phe	Tyr	Leu	Asn	Asn	Ser
			100					105					110		
Val	Met	Glu	Tyr	His	Pro	Arg	Ile	Ile	Met	Leu	Thr	Cys	Ala	Phe	Leu
	115						120					125			
Ala	Cys	Lys	Val	Asp	Glu	Phe	Asn	Val	Ser	Ser	Pro	Gln	Phe	Val	Gly
	130					135					140				
Asn	Leu	Arg	Glu	Ser	Pro	Leu	Gly	Gln	Glu	Lys	Ala	Leu	Glu	Gln	Ile
145					150					155					160
Leu	Glu	Tyr	Glu	Leu	Leu	Leu	Ile	Gln	Gln	Leu	Asn	Phe	His	Leu	Ile
				165					170					175	
Val	His	Asn	Pro	Tyr	Arg	Pro	Phe	Glu	Gly	Phe	Leu	Ile	Asp	Leu	Lys
			180					185					190		
Thr	Arg	Tyr	Pro	Ile	Leu	Glu	Asn	Pro	Glu	Ile	Leu	Arg	Lys	Thr	Ala
	195						200					205			
Asp	Asp	Phe	Leu	Asn	Arg	Ile	Ala	Leu	Thr	Asp	Ala	Tyr	Leu	Leu	Tyr
	210				215					220					
Thr	Pro	Ser	Gln	Ile	Ala	Leu	Thr	Ala	Ile	Leu	Ser	Ser	Ala	Ser	Arg
225				230						235					240
Ala	Gly	Ile	Thr	Met	Glu	Ser	Tyr	Leu	Ser	Glu	Ser	Leu	Met	Leu	Lys
				245					250					255	

Glu Asn Arg Thr Cys Leu Ser Gln Leu Leu Asp Ile Met Lys Ser Met  
260 265 270

Arg Asn Leu Val Lys Lys Tyr Glu Pro Pro Arg Ser Glu Glu Val Ala  
275 280 285

Val Leu Lys Gln Lys Leu Glu Arg Cys His Ser Ala Glu Leu Ala Leu  
290 295 300

Asn Val Ile Thr Lys Lys Arg Lys Gly Tyr Glu Asp Asp Asp Tyr Val  
305 310 315 320

Ser Lys Lys Ser Lys His Glu Glu Glu Glu Trp Thr Asp Asp Asp Leu  
325 330 335

Val Glu Ser Leu  
340

<210> 449

<211> 625

<212> PRT

<213> Homo sapiens

<400> 449

Ala Leu Gly Cys Arg Ser Leu Cys Cys Val Ile Pro Gln Ser His Ala  
1 5 10 15

Arg Asp Ser Gly Tyr Leu Phe Val Gly Leu Ser Gly Phe Arg Leu Pro  
20 25 30

Asp Gln Ala Pro Ala Pro Ala Leu Gln Arg Arg Leu Tyr Ser Pro Asp  
35 40 45

Ala Asp Arg Asp Cys Cys Ser His Gly Pro Val Ser Gly Gly Gln Ser  
50 55 60

Ala Gln Leu Val Leu Asp Thr Lys Asp Leu Thr Ile Glu Lys Val Val  
65 70 75 80

Ile Asn Gly Gln Glu Val Lys Tyr Ala Leu Gly Glu Arg Gln Ser Tyr  
85 90 95

Lys Gly Ser Pro Met Glu Ile Ser Leu Pro Ile Ala Leu Ser Lys Asn  
100 105 110

Gln Glu Ile Val Ile Glu Ile Ser Phe Glu Thr Ser Pro Lys Ser Ser  
115 120 125

Ala Leu Gln Trp Leu Thr Pro Glu Gln Thr Ser Gly Lys Glu His Pro

130		135		140
Tyr Leu Phe Ser Gln Cys Gln Ala Ile His Cys Arg Ala Ile Leu Pro				
145		150		160
Cys Gln Asp Thr Pro Ser Val Lys Leu Thr Tyr Thr Ala Glu Val Ser				
	165		170	175
Val Pro Lys Glu Leu Val Ala Leu Met Ser Ala Ile Arg Asp Gly Glu				
	180		185	190
Thr Pro Asp Pro Glu Asp Pro Ser Arg Lys Ile Tyr Lys Phe Ile Gln				
	195		200	205
Lys Val Pro Ile Pro Cys Tyr Leu Ile Ala Leu Val Val Gly Ala Leu				
	210		215	220
Glu Ser Arg Gln Ile Gly Pro Arg Thr Leu Val Trp Ser Glu Lys Glu				
225		230		240
Gln Val Glu Lys Ser Ala Tyr Glu Phe Ser Glu Thr Glu Ser Met Leu				
	245		250	255
Lys Ile Ala Glu Asp Leu Gly Gly Pro Tyr Val Trp Gly Gln Tyr Asp				
	260		265	270
Leu Leu Val Leu Pro Pro Ser Phe Pro Tyr Gly Gly Met Glu Asn Pro				
	275		280	285
Cys Leu Thr Phe Val Thr Pro Thr Leu Leu Ala Gly Asp Lys Ser Leu				
	290		295	300
Ser Asn Val Ile Ala His Glu Ile Ser His Ser Trp Thr Gly Asn Leu				
305		310		320
Val Thr Asn Lys Thr Trp Asp His Phe Trp Leu Asn Glu Gly His Thr				
	325		330	335
Val Tyr Leu Glu Arg His Ile Cys Gly Arg Leu Phe Gly Glu Lys Phe				
	340		345	350
Arg His Phe Asn Ala Leu Gly Gly Trp Gly Glu Leu Gln Asn Ser Val				
	355		360	365
Lys Thr Phe Gly Glu Thr His Pro Phe Thr Lys Leu Val Val Asp Leu				
	370		375	380
Thr Asp Ile Asp Pro Asp Val Ala Tyr Ser Ser Val Pro Tyr Glu Lys				
385		390		400
Gly Phe Ala Leu Leu Phe Tyr Leu Glu Gln Leu Leu Gly Gly Pro Glu				

405					410					415					
Ile	Phe	Leu	Gly	Phe	Leu	Lys	Ala	Tyr	Val	Glu	Lys	Phe	Ser	Tyr	Lys
			420					425					430		
Ser	Ile	Thr	Thr	Asp	Asp	Trp	Lys	Asp	Phe	Leu	Tyr	Ser	Tyr	Phe	Lys
			435				440					445			
Asp	Lys	Val	Asp	Val	Leu	Asn	Gln	Val	Asp	Trp	Asn	Ala	Trp	Leu	Tyr
			450				455					460			
Ser	Pro	Gly	Leu	Pro	Pro	Ile	Lys	Pro	Asn	Tyr	Asp	Met	Thr	Leu	Thr
							470				475				480
Asn	Ala	Cys	Ile	Ala	Leu	Ser	Gln	Arg	Trp	Ile	Thr	Ala	Lys	Glu	Asp
				485				490							495
Asp	Leu	Asn	Ser	Phe	Asn	Ala	Thr	Asp	Leu	Lys	Asp	Leu	Ser	Ser	His
			500					505							510
Gln	Leu	Asn	Glu	Phe	Leu	Ala	Gln	Thr	Leu	Gln	Arg	Ala	Pro	Leu	Pro
			515				520					525			
Leu	Gly	His	Ile	Lys	Arg	Met	Gln	Glu	Val	Tyr	Asn	Phe	Asn	Ala	Ile
			530				535				540				
Asn	Asn	Ser	Glu	Ile	Arg	Phe	Arg	Trp	Leu	Arg	Leu	Cys	Ile	Gln	Ser
							550				555				560
Lys	Trp	Glu	Asp	Ala	Ile	Pro	Leu	Ala	Leu	Lys	Met	Ala	Thr	Glu	Gln
				565				570							575
Gly	Arg	Met	Lys	Phe	Thr	Arg	Pro	Leu	Phe	Lys	Asp	Leu	Ala	Ala	Phe
			580					585					590		
Asp	Lys	Ser	His	Asp	Gln	Ala	Val	Arg	Thr	Tyr	Gln	Glu	His	Lys	Ala
			595				600					605			
Ser	Met	His	Pro	Val	Thr	Ala	Met	Leu	Val	Gly	Lys	Asp	Leu	Lys	Val
			610				615				620				

Asp  
625

<210> 450  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 450

```

Asp Gly Ala Leu Leu Ile Pro His Leu Val Gln Phe Leu His Leu Gln
 1              5              10              15

Met Ala Ala Val Arg Ser Trp Gly Arg Arg Thr Leu Gln Ser His Thr
      20              25              30

Lys Cys Leu Pro Pro Gly Pro Leu Ser Ser Leu Ser Ala Thr Gln Cys
      35              40              45

His Gln Asp Glu Gln Ser Trp Pro Ser Ile Met Thr Glu Arg Gly Arg
      50              55              60

Leu Arg Gly Ser Pro Asp Cys Ala Glu Leu Arg Thr Gln Trp Arg Phe
 65              70              75              80

Ser Gly Thr Leu Arg Ser Leu Trp Gln Ala Trp Ser Gly Ser Pro
      85              90              95

```

&lt;210&gt; 451

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 451

```

Ser Ser Pro Val Asn Ala Thr Ala Phe Ala Ser Cys Leu Cys Ala Val
 1              5              10              15

Cys Asp Val Thr Gly Leu Phe Cys Lys His Gln His Val Gly Lys Leu
      20              25              30

Gly Ser Asn Leu Cys Ala Phe Val Phe Pro Met Gly Arg Asp Ser Gly
      35              40              45

Ser Arg Val Pro Leu Cys Ile Cys Phe Phe Val Leu Ala Glu Ile Leu
      50              55              60

Leu Glu Val Gly Arg Phe Ser Gln Gly Phe Ile Arg Leu Met Ser Ile
 65              70              75              80

Ser Val Leu Pro Ser Ser Lys Pro His Leu Leu Asn Gly Lys Gly Arg
      85              90              95

Trp Met Ala Pro Ala Gln Leu Asp Leu Arg Leu Trp Ser Gln Arg Arg
      100              105              110

Cys Gly Ala Glu Ala Tyr Pro Ala Asp Thr Leu Asp Ile Leu Leu Pro
      115              120              125

```



Pro Gly Cys Arg Gly Gln Arg Pro Pro Ala Gln Gly Ser Cys Thr Tyr  
 130 135 140

Leu Leu Ile  
 145

<210> 452

<211> 487

<212> PRT

<213> Homo sapiens

<400> 452

Asp Leu Glu Arg Ser Tyr Leu Leu Lys Ile Asn Gly Lys Val Ala Glu  
 1 5 10 15

Arg Pro Gln His Met Leu Met Arg Val Ser Val Gly Ile His Lys Glu  
 20 25 30

Asp Ile Asp Ala Ala Ile Glu Thr Tyr Asn Leu Leu Ser Glu Arg Trp  
 35 40 45

Phe Thr His Ala Ser Pro Thr Leu Phe Asn Ala Gly Thr Asn Arg Pro  
 50 55 60

Gln Leu Ser Ser Cys Phe Leu Leu Ser Met Lys Asp Asp Ser Ile Glu  
 65 70 75 80

Gly Ile Tyr Asp Thr Leu Lys Gln Cys Ala Leu Ile Ser Lys Ser Ala  
 85 90 95

Gly Gly Ile Gly Val Ala Val Ser Cys Ile Arg Ala Thr Gly Ser Tyr  
 100 105 110

Ile Ala Gly Thr Asn Gly Asn Ser Asn Gly Leu Val Pro Met Leu Arg  
 115 120 125

Val Tyr Asn Asn Thr Ala Arg Tyr Val Asp Gln Gly Gly Asn Lys Arg  
 130 135 140

Pro Gly Ala Phe Ala Ile Tyr Leu Glu Pro Trp His Leu Asp Ile Phe  
 145 150 155 160

Glu Phe Leu Asp Leu Lys Lys Asn Thr Gly Lys Glu Glu Gln Arg Ala  
 165 170 175

Arg Asp Leu Phe Phe Ala Leu Trp Ile Pro Asp Leu Phe Met Lys Arg  
 180 185 190

Val Glu Thr Asn Gln Asp Trp Ser Leu Met Cys Pro Asn Glu Cys Pro

195	200	205
Gly Leu Asp Glu Val Trp Gly Glu Glu Phe Glu Lys Leu Tyr Ala Ser		
210	215	220
Tyr Glu Lys Gln Gly Arg Val Arg Lys Val Val Lys Ala Gln Gln Leu		
225	230	235
Trp Tyr Ala Ile Ile Glu Ser Gln Thr Glu Thr Gly Thr Pro Tyr Met		
	245	250
		255
Leu Tyr Lys Asp Ser Cys Asn Arg Lys Ser Asn Gln Gln Asn Leu Gly		
	260	265
		270
Thr Ile Lys Cys Ser Asn Leu Cys Thr Glu Ile Val Glu Tyr Thr Ser		
	275	280
		285
Lys Asp Glu Val Ala Val Cys Asn Leu Ala Ser Leu Ala Leu Asn Met		
	290	295
		300
Tyr Val Thr Ser Glu His Thr Tyr Asp Phe Lys Lys Leu Ala Glu Val		
305	310	315
		320
Thr Lys Val Val Val Arg Asn Leu Asn Lys Ile Ile Asp Ile Asn Tyr		
	325	330
		335
Tyr Pro Val Pro Glu Ala Cys Leu Ser Asn Lys Arg His Arg Pro Ile		
	340	345
		350
Gly Ile Gly Val Gln Gly Leu Ala Asp Ala Phe Ile Leu Met Arg Tyr		
	355	360
		365
Pro Phe Glu Ser Ala Glu Ala Gln Leu Leu Asn Lys Gln Ile Phe Glu		
	370	375
		380
Thr Ile Tyr Tyr Gly Ala Leu Glu Ala Ser Cys Asp Leu Ala Lys Glu		
385	390	395
		400
Gln Gly Pro Tyr Glu Thr Tyr Glu Gly Ser Pro Val Ser Lys Gly Ile		
	405	410
		415
Leu Gln Tyr Asp Met Trp Asn Val Thr Pro Thr Asp Leu Trp Asp Trp		
	420	425
		430
Lys Val Leu Lys Glu Lys Ile Ala Lys Tyr Gly Ile Arg Asn Ser Leu		
	435	440
		445
Leu Ile Ala Pro Met Pro Thr Ala Ser Thr Ala Gln Ile Leu Gly Asn		
	450	455
		460
Asn Glu Ser Ile Glu Pro Tyr Thr Ser Asn Ile Tyr Thr Arg Arg Ser		

465                                      470                                      475                                      480

Cys Gln Glu Asn Phe Arg Leu  
                                    485

<210> 453

<211> 330

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (213)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 453

Glu Glu Val Pro Leu Ala Gln Pro Glu Ser Lys Arg Asp Ile Leu Phe  
1                                      5                                      10                                      15

Leu Phe Asp Gly Ser Ala Asn Leu Val Gly Gln Phe Pro Val Val Arg  
                                    20                                      25                                      30

Asp Phe Leu Tyr Lys Ile Ile Asp Glu Leu Asn Val Lys Pro Glu Gly  
                                    35                                      40                                      45

Thr Arg Ile Ala Val Ala Gln Tyr Ser Asp Asp Val Lys Val Glu Ser  
                                    50                                      55                                      60

Arg Phe Asp Glu His Gln Ser Lys Pro Glu Ile Leu Asn Leu Val Lys  
65                                      70                                      75                                      80

Arg Met Lys Ile Lys Thr Gly Lys Ala Leu Asn Leu Gly Tyr Ala Leu  
                                    85                                      90                                      95

Asp Tyr Ala Gln Arg Tyr Ile Phe Val Lys Ser Ala Gly Ser Arg Ile  
                                    100                                      105                                      110

Glu Asp Gly Val Leu Gln Phe Leu Val Leu Leu Val Ala Gly Arg Ser  
115                                      120                                      125

Ser Asp Arg Val Asp Gly Pro Ala Ser Asn Leu Lys Gln Ser Gly Val  
130                                      135                                      140

Val Pro Phe Ile Phe Gln Ala Lys Asn Ala Asp Pro Ala Glu Leu Glu  
145                                      150                                      155                                      160

Gln Ile Val Leu Ser Pro Ala Phe Ile Leu Ala Ala Glu Ser Leu Pro  
                                    165                                      170                                      175

Lys Ile Gly Asp Leu His Pro Gln Ile Val Asn Leu Leu Lys Ser Val  
 180 185 190  
 His Asn Gly Ala Pro Ala Pro Val Ser Gly Glu Lys Asp Val Val Phe  
 195 200 205  
 Leu Leu Asp Gly Xaa Glu Gly Val Arg Ser Gly Phe Pro Leu Leu Lys  
 210 215 220  
 Glu Phe Val Gln Arg Val Val Glu Ser Leu Asp Val Gly Gln Asp Arg  
 225 230 235 240  
 Val Arg Val Ala Val Val Gln Tyr Ser Asp Arg Thr Arg Pro Glu Phe  
 245 250 255  
 Tyr Leu Asn Ser Tyr Met Asn Lys Gln Asp Val Val Asn Ala Val Arg  
 260 265 270  
 Gln Leu Thr Leu Leu Gly Gly Pro Thr Pro Asn Thr Gly Ala Ala Leu  
 275 280 285  
 Glu Phe Val Leu Arg Asn Ile Leu Val Ser Ser Ala Gly Ser Arg Ile  
 290 295 300  
 Thr Glu Gly Val Pro Gln Leu Leu Ile Val Leu Thr Ala Asp Ser Leu  
 305 310 315 320  
 Gly Met Met Cys Gly Thr Pro Pro Trp Ser  
 325 330

<210> 454  
 <211> 280  
 <212> PRT  
 <213> Homo sapiens

<400> 454  
 Leu Glu Phe Arg Ser Gly Lys Val Ala Phe Arg Asp Cys Glu Gly Arg  
 1 5 10 15  
 Tyr Leu Ala Pro Ser Gly Pro Ser Gly Thr Leu Lys Ala Gly Lys Ala  
 20 25 30  
 Thr Lys Val Gly Lys Asp Glu Leu Phe Ala Leu Glu Gln Ser Cys Ala  
 35 40 45  
 Gln Val Val Leu Gln Ala Ala Asn Glu Arg Asn Val Ser Thr Arg Gln  
 50 55 60  
 Gly Met Asp Leu Ser Ala Asn Gln Asp Glu Glu Thr Asp Gln Glu Thr

65	70	75	80
Phe Gln Leu Glu Ile Asp Arg Asp Thr Lys Lys Cys Ala Phe Arg Thr	85	90	95
His Thr Gly Lys Tyr Trp Thr Leu Thr Ala Thr Gly Gly Val Gln Ser	100	105	110
Thr Ala Ser Ser Lys Asn Ala Ser Cys Tyr Phe Asp Ile Glu Trp Arg	115	120	125
Asp Arg Arg Ile Thr Leu Arg Ala Ser Asn Gly Lys Phe Val Thr Ser	130	135	140
Lys Lys Asn Gly Gln Leu Ala Ala Ser Val Glu Thr Ala Gly Asp Ser	145	150	155
Glu Leu Phe Leu Met Lys Leu Ile Asn Arg Pro Ile Ile Val Phe Arg	165	170	175
Gly Glu His Gly Phe Ile Gly Cys Arg Lys Val Thr Gly Thr Leu Asp	180	185	190
Ala Asn Arg Ser Ser Tyr Asp Val Phe Gln Leu Glu Phe Asn Asp Gly	195	200	205
Ala Tyr Asn Ile Lys Asp Ser Thr Gly Lys Tyr Trp Thr Val Gly Ser	210	215	220
Asp Ser Ala Val Thr Ser Ser Gly Asp Thr Pro Val Asp Phe Phe Phe	225	230	235
Glu Phe Cys Asp Tyr Asn Lys Val Ala Ile Lys Val Gly Gly Arg Tyr	245	250	255
Leu Lys Gly Asp His Ala Gly Val Leu Lys Ala Ser Ala Glu Thr Val	260	265	270
Asp Pro Ala Ser Leu Trp Glu Tyr	275	280	

&lt;210&gt; 455

&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 455

Asn Ser Arg Val Asp Pro Arg Val Arg Thr Ala Leu Gln Ile Phe Gln	1	5	10	15
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Arg Ile Pro Arg Trp Pro His Val Ala Gln Trp Asn Arg Ser Ser Ala  
20 25 30

Thr Pro Ala Gly Val Arg Gly Gly Arg Ala Ala Ala Thr Phe Arg Ala  
35 40 45

Asn Asp His Gln His Ile Arg Tyr Asn Pro Leu Gln Asp Glu Trp Val  
50 55 60

Leu Val Ser Ala His Arg Met Lys Arg Pro Trp Gln Gly Gln Val Glu  
65 70 75 80

Pro Gln Leu Leu Lys Thr Val Pro Arg His Asp Pro Leu Asn Pro Leu  
85 90 95

Cys Pro Gly Ala Ile Arg Ala Asn Gly Glu Val Asn Pro Gln Tyr Asp  
100 105 110

Ser Thr Phe Leu Phe Asp Asn Asp Phe Pro Ala Leu Gln Pro Asp Ala  
115 120 125

Pro Ser Pro Gly Pro Ser Asp His Pro Leu Phe Gln Ala Lys Ser Ala  
130 135 140

Arg Gly Val Cys Lys Val Met Cys Phe His Pro Trp Ser Asp Val Thr  
145 150 155 160

Leu Pro Leu Met Ser Val Pro Glu Ile Arg Ala Val Val Asp Ala Trp  
165 170 175

Ala Ser Val Thr Glu Glu Leu Gly Ala Gln Tyr Pro Trp Val Gln Ile  
180 185 190

Phe Glu Asn Lys Gly Ala Met Met Gly Cys Ser Asn Pro His Pro His  
195 200 205

Cys Gln Val Trp Ala Ser Ser Phe Leu Pro Asp Ile Ala Gln Arg Glu  
210 215 220

Glu Arg Ser Gln Gln Ala Tyr Lys Ser Gln His Gly Glu Pro Leu Leu  
225 230 235 240

Met Glu Tyr Ser Arg Gln Ser Tyr Ser Gly Arg Asn Val Trp Ser  
245 250 255

&lt;210&gt; 456

&lt;211&gt; 278

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 456

Ser Pro Gln Trp Pro Leu Cys Ala Xaa Lys Ser Val Arg Val Pro Asn  
1 5 10 15

Gly Gly Gly Gly Gly Gly Gly Leu Pro Ile Ser Thr Val Arg Glu Val  
20 25 30

Ala Leu Leu Arg Arg Leu Glu Ala Phe Glu His Pro Asn Val Val Arg  
35 40 45

Leu Met Asp Val Cys Ala Thr Ser Arg Thr Asp Arg Glu Ile Lys Val  
50 55 60

Thr Leu Val Phe Glu His Val Asp Gln Asp Leu Arg Thr Tyr Leu Asp  
65 70 75 80

Lys Ala Pro Pro Pro Gly Leu Pro Ala Glu Thr Ile Lys Asp Leu Met  
85 90 95

Arg Gln Phe Leu Arg Gly Leu Asp Phe Leu His Ala Asn Cys Ile Val  
100 105 110

His Arg Asp Leu Lys Pro Glu Asn Ile Leu Val Thr Ser Gly Gly Thr  
115 120 125

Val Lys Leu Ala Asp Phe Gly Leu Ala Arg Ile Tyr Ser Tyr Gln Met  
130 135 140

Ala Leu Thr Pro Val Val Val Thr Leu Trp Tyr Arg Ala Pro Glu Val  
145 150 155 160

Leu Leu Gln Ser Thr Tyr Ala Thr Pro Val Asp Met Trp Ser Val Gly  
165 170 175

Cys Ile Phe Ala Glu Met Phe Arg Arg Lys Pro Leu Phe Cys Gly Asn  
180 185 190

Ser Glu Ala Asp Gln Leu Gly Lys Ile Phe Asp Leu Ile Gly Leu Pro  
195 200 205

Pro Glu Asp Asp Trp Pro Arg Asp Val Ser Leu Pro Arg Gly Ala Phe  
210 215 220

Pro Pro Arg Gly Pro Arg Pro Val Gln Ser Val Val Pro Glu Met Glu

[illegible]

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<210> 457
<211> 35
<212> PRT
<213> Homo sapiens
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<400> 457
His Pro Gly Arg Glu Gln Gln Arg Ala Gly His Thr Thr Cys Gln Ala
 1               5               10               15
Leu Gly Val Cys Gly Thr Met Ser Ser Pro Leu Gln Cys Ile His Ser
      20               25               30
Pro Asp Leu
      35

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<210> 458
<211> 154
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids
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$\langle 220 \rangle$



<221> SITE

<222> (132)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 458

Arg Tyr Ser Val Ile Leu Leu Asp Thr Leu Leu Gly Arg Met Leu Pro  
1 5 10 15

Gln Leu Val Cys Arg Leu Val Leu Arg Cys Ser Met Asp Asp Ser Ala  
20 25 30

Gly Pro Arg Glu Trp Leu Pro Arg Asp Ser Glu Cys His Leu Cys Met  
35 40 45

Ser Val Thr Thr Gln Ala Gly Asn Ser Ser Glu Gln Ala Ile Pro Gln  
50 55 60

Ala Met Leu Gln Ala Cys Val Gly Ser Trp Leu Asp Arg Glu Lys Cys  
65 70 75 80

Lys Gln Phe Val Glu Gln His Thr Pro Gln Leu Leu Thr Leu Val Pro  
85 90 95

Arg Gly Trp Asp Ala His Thr Thr Cys Gln Ala Ser Gly Cys Xaa Gly  
100 105 110

Pro Cys Pro Ala Leu Ser Ser Val Ser Xaa Ala Pro Thr Phe Asp Glu  
115 120 125

Asn Ser Xaa Xaa Gln Ala Gly His Thr His Ser Pro Ser Leu Ala Leu  
130 135 140

Ile Leu Leu Ser Cys Lys Gly Lys Ala Lys  
145 150

<210> 459

<211> 396

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (370)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (395)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 459

Arg	Val	Ile	Gly	Ser	Thr	Val	Xaa	Arg	Gly	Leu	Arg	Pro	Ser	Cys	Pro
1				5					10					15	

Asn	Ser	Gln	Ser	Pro	Val	Lys	Val	Glu	Glu	Thr	Cys	Gly	Cys	Arg	Trp
		20						25					30		

Thr	Cys	Pro	Cys	Val	Cys	Thr	Gly	Ser	Ser	Thr	Arg	His	Ile	Val	Thr
		35					40					45			

Phe	Asp	Gly	Gln	Asn	Phe	Lys	Leu	Thr	Gly	Ser	Cys	Ser	Tyr	Val	Leu
	50					55					60				

Phe	Gln	Asn	Lys	Glu	Gln	Asp	Leu	Glu	Val	Ile	Leu	His	Asn	Gly	Ala
65					70					75					80

Cys	Ser	Pro	Gly	Ala	Arg	Gln	Gly	Cys	Met	Lys	Ser	Ile	Glu	Val	Lys
				85					90					95	

His	Ser	Ala	Leu	Ser	Val	Glu	Leu	His	Ser	Asp	Met	Glu	Val	Thr	Val
			100					105						110	

Asn	Gly	Arg	Leu	Val	Ser	Val	Pro	Tyr	Val	Gly	Gly	Asn	Met	Glu	Val
		115					120					125			

Asn	Val	Tyr	Gly	Ala	Ile	Met	His	Glu	Val	Arg	Phe	Asn	His	Leu	Gly
	130					135					140				

His	Ile	Phe	Thr	Phe	Thr	Pro	Gln	Asn	Asn	Glu	Phe	Gln	Leu	Gln	Leu
145					150					155					160

Ser	Pro	Lys	Thr	Phe	Ala	Ser	Lys	Thr	Tyr	Gly	Leu	Cys	Gly	Ile	Cys
				165					170					175	

Asp	Glu	Asn	Gly	Ala	Asn	Asp	Phe	Met	Leu	Arg	Asp	Gly	Thr	Val	Thr
			180					185					190		

Thr	Asp	Trp	Lys	Thr	Leu	Val	Gln	Glu	Trp	Thr	Val	Gln	Arg	Pro	Gly
		195					200					205			

Gln	Thr	Cys	Gln	Pro	Ile	Leu	Glu	Glu	Gln	Cys	Leu	Val	Pro	Asp	Ser
	210					215					220				

Ser	His	Cys	Gln	Val	Leu	Leu	Leu	Pro	Leu	Phe	Ala	Glu	Cys	His	Lys
225					230					235					240

Val Leu Ala Pro Ala Thr Phe Tyr Ala Ile Cys Gln Gln Asp Ser Cys  
245 250 255

His Gln Glu Gln Val Cys Glu Val Ile Ala Ser Tyr Ala His Leu Cys  
260 265 270

Arg Thr Asn Gly Val Cys Val Asp Trp Arg Thr Pro Asp Phe Cys Ala  
275 280 285

Met Ser Cys Pro Pro Ser Leu Val Tyr Asn His Cys Glu His Gly Cys  
290 295 300

Pro Arg His Cys Asp Gly Asn Val Ser Ser Cys Gly Asp His Pro Ser  
305 310 315 320

Glu Ala Val Ser Ala Leu Gln Ile Lys Ser Cys Trp Lys Ala Ala Val  
325 330 335

Ser Leu Lys Arg Pro Ala Leu Ser Ala Leu Val Arg Met Glu Ser Ser  
340 345 350

Thr Ser Ser Trp Lys Pro Gly Ser Arg Thr Thr Ser Pro Val Arg Ser  
355 360 365

Ala Xaa Ala Ser Ala Gly Gly Arg Ser Thr Ala Gln Arg Ser Pro Ala  
370 375 380

Pro Arg Pro Lys Leu Pro Arg Val Ala Cys Xaa Lys  
385 390 395

<210> 460

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (112)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 460

Glu	Gln	Leu	Thr	Gly	Ser	Arg	Ala	Lys	Ser	Val	Gly	Ser	Trp	Arg	Arg
1				5					10					15	

Ser	Ser	Gln	Ser	Val	Lys	Lys	Pro	Thr	Glu	Gly	Lys	Ser	Arg	Glu	Glu
			20					25					30		

Glu	Lys	Lys	Gln	Lys	Phe	Trp	His	Leu	Phe	Pro	Gly	Cys	Ala	Lys	Met
			35				40					45			

Gly	Asp	Trp	Ser	Phe	Leu	Gly	Asn	Phe	Leu	Glu	Glu	Val	His	Lys	His
	50					55					60				

Ser	Thr	Val	Val	Gly	Lys	Val	Trp	Leu	Thr	Val	Leu	Phe	Ile	Phe	Arg
	65				70					75					80

Met	Leu	Val	Leu	Gly	Thr	Ala	Ala	Glu	Ser	Ser	Trp	Gly	Asp	Glu	Gln
				85					90					95	

Ala	Asp	Phe	Arg	Cys	Asp	Thr	Ile	Gln	Pro	Gly	Cys	Gln	Asn	Val	Xaa
			100					105					110		

Xaa	Asp	Gln	Ala	Phe	Pro	Xaa	Phe	Pro	His	Xaa	Leu
		115					120				

<210> 461

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 461

Pro	Ala	Arg	Trp	Leu	Leu	Ser	Thr	Thr	Met	Ala	Ser	Thr	Glu	Gly	Thr
1				5					10					15	

Cys	Cys	Pro	Val	Asn	Trp	Val	Glu	His	Gln	Asp	Ser	Cys	Tyr	Trp	Phe
			20					25					30		

Ser His Ser Gly Met Ser Trp Ala Glu Ala Glu Lys Tyr Cys Gln Leu  
                   35                                  40                                  45

Lys Asn Ala His Leu Val Val Ile Lys Ser Arg Glu Glu Gln Val Arg  
                   50                                  55                                  60

Ala Ser Trp Tyr Ser Val Pro Lys Thr Cys Xaa Ile  
                   65                                  70                                  75

<210> 462

<211> 138

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 462

Leu Gly Pro Asn Lys Lys Lys Pro Ala Met Leu Leu Phe Leu Leu Ser  
                   1                                  5                                  10                                  15

Ala Leu Val Leu Leu Thr Gln Pro Leu Gly Tyr Leu Glu Ala Glu Met  
                                   20                                  25                                  30

Lys Thr Tyr Ser His Arg Thr Met Pro Ser Ala Cys Thr Leu Val Met  
                   35                                  40                                  45

Cys Ser Ser Val Glu Ser Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly  
                   50                                  55                                  60

Arg Xaa Gly Pro Arg Gly Glu Lys Gly Asp Pro Gly Leu Pro Gly Ala  
                   65                                  70                                  75                                  80

Ala Gly Gln Ala Gly Met Pro Gly Gln Ala Gly Pro Val Gly Pro Lys  
                                   85                                  90                                  95

Gly Asp Asn Gly Ser Val Gly Glu Pro Gly Pro Lys Gly Asp Thr Trp

100 105 110  
 Ala Lys Leu Asp Leu Gln Glu Leu Pro Val Xaa Leu Val Gln Leu Xaa  
 115 120 125  
 Glu Lys Val Pro Trp Gly Ser Lys Gly Thr  
 130 135  
  
 <210> 463  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 463  
 Gly Arg Gly Leu Arg Gly Pro Gly Asp Ser Arg Pro Arg His Leu Pro  
 1 5 10 15  
 Val Ala Cys His Leu Leu Arg Leu Arg Thr Pro His Leu Asp Arg Ala  
 20 25 30  
 Leu Pro Arg Arg Leu Pro Ser Gln Asp Tyr Thr Gly Gly Met Gly Ile  
 35 40 45  
 Val Asn Gly Ala Lys Trp Asn Pro Arg Thr Gly Thr Ile Asn Asp Phe  
 50 55 60  
 Ser Tyr Leu His Thr Asn Cys Leu Glu Leu Ser Phe Tyr Leu Gly Cys  
 65 70 75 80  
 Asp Lys Phe Pro His Glu Ser Glu Leu Pro Arg Glu Trp Glu Asn Asn  
 85 90 95  
 Lys Glu Ala Leu Leu Thr Phe Met Glu Gln Val His Arg Gly Ile Lys  
 100 105 110  
 Gly Val Val Thr Asp Glu Gln Gly Ile Pro Ile Ala Asn Ala Thr Ile  
 115 120 125  
 Ser Val Ser Gly Ile Asn His Gly Val Lys Thr Ala Ser Gly Gly Asp  
 130 135 140  
 Tyr Trp Arg Ile Leu Asn Pro Gly Glu Tyr Arg Val Thr Ala His Ala  
 145 150 155 160  
 Arg Gly Tyr Thr Pro Ser Ala Lys Thr Cys Asn Val Asp Tyr Asp Ile  
 165 170 175  
 Gly Ala Thr Gln Cys Asn Phe Ile Leu Ala Arg Ser Asn Trp Lys Arg  
 180 185 190

Ile Arg Glu Ile Met Ala Met Asn Gly Asn Arg Pro Ile Pro His Ile  
 195 200 205

Asp Pro Ser Arg Pro Met Thr Pro Gln Gln Arg Arg Leu Gln Gln Arg  
 210 215 220

Arg Leu Gln His Arg Leu Arg Phe Gly His Arg Cys Gly Cys Gly Ala  
 225 230 235 240

Ser Thr Pro Pro Pro Pro  
 245

<210> 464

<211> 232

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (223)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (225)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 464

Arg Asp Arg Ser Cys Arg Gly Pro Gly Arg Arg Ser Pro Ile Pro Ser  
 1 5 10 15

Pro Gln Val Leu Gly Thr Thr Trp Val Pro Arg Ala Gly Glu Met Val  
 20 25 30

Cys Gly Gly Phe Ala Cys Ser Lys Asn Ala Leu Cys Ala Leu Asn Val  
 35 40 45

Val Tyr Met Leu Val Ser Leu Leu Leu Ile Gly Val Ala Ala Trp Gly  
 50 55 60

Lys Gly Leu Gly Leu Val Ser Ser Ile His Ile Ile Gly Gly Val Ile  
 65 70 75 80

Ala Val Gly Val Phe Leu Leu Leu Ile Ala Val Ala Gly Leu Val Gly  
 85 90 95

Ala Val Asn His His Gln Val Leu Leu Phe Phe Tyr Met Ile Ile Leu  
 100 105 110

Gly Leu Val Phe Ile Phe Gln Phe Val Ile Ser Cys Ser Cys Leu Ala  
115 120 125

Ile Asn Arg Ser Lys Gln Thr Asp Val Ile Asn Ala Ser Trp Trp Val  
130 135 140

Met	Ser	Asn	Lys	Thr	Arg	Asp	Glu	Leu	Glu	Arg	Ser	Phe	Asp	Cys	Cys
145					150					155					160

Gly Leu Phe Asn Leu Thr Thr Leu Tyr Gln Gln Asp Tyr Asp Phe Cys  
165 170 175

Thr Ala Ile Cys Lys Ser Gln Ser Pro Thr Cys Gln Met Cys Gly Glu  
180 185 190

Lys Phe Leu Lys His Ser Asp Glu Ala Leu Lys Ile Leu Gly Gly Val  
195 200 205

Gly Leu Phe Phe Ser Phe Thr Glu Ile Leu Gly Val Trp Leu Xaa Met  
210 215 220

Xaa Phe Arg Asn Gln Lys Gly Ser  
225 230

<210> 465

<211> 215

<212> PRT

<213> Homo sapiens

<400> 465

Gly Leu Ala Pro Pro Arg Ser Arg Thr Met Ala Val Lys Lys Ile Ala  
1 5 10 15

Ile Phe Gly Ala Thr Gly Gln Thr Gly Leu Thr Thr Leu Ala Gln Ala  
20 25 30

Val Gln Ala Gly Tyr Glu Val Thr Val Leu Val Arg Asp Ser Ser Arg  
35 40 45

Leu Pro Ser Glu Gly Pro Arg Pro Ala His Val Val Val Gly Asp Val  
50 55 60

Leu Gln Ala Ala Asp Val Asp Lys Thr Val Ala Gly Gln Asp Ala Val  
65 70 75 80

Ile Val Leu Leu Gly Thr Arg Asn Asp Leu Ser Pro Thr Thr Val Met  
85 90 95



Ser Glu Gly Ala Arg Asn Ile Val Ala Ala Met Lys Ala His Gly Val  
                   100                                  105                                  110  
 Asp Lys Val Val Ala Cys Thr Ser Ala Phe Leu Leu Trp Asp Pro Thr  
                   115                                  120                                  125  
 Lys Val Pro Pro Arg Leu Gln Ala Val Thr Asp Asp His Ile Arg Met  
                   130                                  135                                  140  
 His Lys Val Leu Arg Glu Ser Gly Leu Lys Tyr Val Ala Val Met Pro  
                   145                                  150                                  155                                  160  
 Pro His Ile Gly Asp Gln Pro Leu Thr Gly Ala Tyr Thr Val Thr Leu  
                                   165                                  170                                  175  
 Asp Gly Arg Gly Pro Ser Arg Val Ile Ser Lys His Asp Leu Gly His  
                                   180                                  185                                  190  
 Phe Met Leu Arg Cys Leu Thr Thr Asp Glu Tyr Asp Gly His Ser Thr  
                   195                                  200                                  205  
 Tyr Pro Ser His Gln Tyr Gln  
                   210                                  215

<210> 466

<211> 131

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (97)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 466

Arg Thr Thr Ala Val Glu Leu Phe Val Lys Ala Gly Ser Asp Gly Ala  
           1                                  5                                  10                                  15

Lys Ile Gly Asn Cys Pro Phe Ser Gln Arg Leu Phe Met Val Leu Trp

	20		25		30
Leu Lys Gly Val Thr Phe Asn Val Thr Thr Val Asp Thr Lys Arg Arg					
	35		40		45
Thr Glu Thr Val Gln Lys Leu Cys Pro Gly Gly Gln Leu Pro Phe Leu					
	50		55		60
Leu Tyr Gly Thr Glu Val His Thr Asp Thr Asn Lys Ile Glu Glu Phe					
	65		70		75
					80
Leu Glu Ala Val Leu Cys Pro Pro Arg Tyr Pro Lys Leu Ala Xaa Leu					
		85		90	95
Xaa Pro Glu Ser Asn Thr Xaa Gly Leu Asp Ile Phe Ala Lys Phe Ser					
	100		105		110
Ala Tyr Ile Lys Asn Ser Lys Pro Ser Thr Gln Leu Thr Ile Trp Arg					
	115		120		125
Arg Asp Ser					
	130				

<210> 467  
 <211> 211  
 <212> PRT  
 <213> Homo sapiens

<400> 467

Gly Leu Trp Ile Ser Met Leu Cys Arg Trp Leu Met Trp Met Val Met					
1		5		10	15
Asn Tyr Ser Trp Lys Lys Asn Arg Met Trp Arg Lys Asn Arg Ser Phe					
	20		25		30
Tyr Ala Asn Asn His Cys Ile Gly Thr Asp Leu Asn Arg Asn Phe Ala					
	35		40		45
Ser Lys His Trp Cys Glu Glu Gly Ala Ser Ser Ser Ser Cys Ser Glu					
	50		55		60
Thr Tyr Cys Gly Leu Tyr Pro Glu Ser Glu Pro Glu Val Lys Ala Val					
	65		70		75
					80
Ala Ser Phe Leu Arg Arg Asn Ile Asn Gln Ile Lys Ala Tyr Ile Ser					
		85		90	95
Met His Ser Tyr Ser Gln His Ile Val Phe Pro Tyr Ser Tyr Thr Arg					
	100		105		110

Ser Lys Ser Lys Asp His Glu Glu Leu Ser Leu Val Ala Ser Glu Ala  
 115 120 125  
 Val Arg Ala Ile Glu Lys Thr Ser Lys Asn Thr Arg Tyr Thr His Gly  
 130 135 140  
 His Gly Ser Glu Thr Leu Tyr Leu Ala Pro Gly Gly Gly Asp Asp Trp  
 145 150 155 160  
 Ile Tyr Asp Leu Gly Ile Lys Tyr Ser Phe Thr Ile Glu Leu Arg Asp  
 165 170 175  
 Thr Gly Thr Tyr Gly Phe Leu Leu Pro Glu Arg Tyr Ile Lys Pro Thr  
 180 185 190  
 Cys Arg Glu Ala Phe Ala Ala Val Ser Lys Ile Ala Trp His Val Ile  
 195 200 205  
 Arg Asn Val  
 210

<210> 468  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 468  
 Leu Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg Cys Gly  
 1 5 10 15  
 Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser  
 20 25 30  
 Phe Lys Val Thr Ser Arg Thr Gly Thr Leu Ala Ala Gln Ala Leu Arg  
 35 40 45  
 Ala Arg Gly Pro Ser Gly Ala Ala Ala Met Arg Ser Met Ala Ser Gly  
 50 55 60  
 Gly Gly Val Pro Thr Asp Glu Glu Gln Ala Thr Gly Leu Glu Arg Glu  
 65 70 75 80  
 Ile Met Leu Ala Ala Lys Lys Gly Leu Asp Pro Tyr Asn Val Leu Ala  
 85 90 95  
 Pro Lys Gly Ala Ser Gly Thr Arg Glu Asp Pro Asn Leu Val Pro Ser  
 100 105 110

Ile Ser Asn Lys Arg Ile Val Gly Cys Ile Cys Glu Glu Asp Asn Thr  
115 120 125

Ser Val Val Trp Phe Trp Leu His Lys Gly Glu Ala Gln Arg Cys Pro  
130 135 140

Arg Cys Gly Ala His Tyr Lys Leu Val Pro Gln Gln Leu Ala His  
145 150 155

<210> 469

<211> 58

<212> PRT

<213> Homo sapiens

<400> 469

Lys Phe Thr Lys Cys Leu Val Gln Leu Asn Ile Leu Leu Phe Lys Cys  
1 5 10 15

Val Leu Leu Asn Phe Leu Leu Ser Leu Leu Asn Asn Leu Cys Gly Lys  
20 25 30

Met Cys Val Ser Thr Phe Pro Ser Phe Phe Ile Ser Tyr Phe Gln Glu  
35 40 45

Ser Asn Val Ala Ile Asn Cys Ile Leu Val  
50 55

<210> 470

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 470

Cys Ser Gly Thr Trp Lys Lys His Asp Arg Lys Ile Ala Asp Gln Glu  
1 5 10 15

Ile Trp Glu Arg Gly Met Ser Ile Asp Leu Ser Phe Phe Phe Phe Phe  
20 25 30

Phe Phe Phe Phe Phe Phe Phe Phe Xaa  
35 40

<210> 471  
<211> 60  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (54)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 471  
Gln Ala Gly Leu Ser Arg Tyr Gly Ser Pro Leu Gly Arg Arg Lys Lys  
1 5 10 15  
Gly Gly Ser Cys Leu Leu Pro Gly Glu Gly Leu Arg Gly Arg Gly Lys  
20 25 30  
Pro Arg Ala Pro Thr Lys Ala Asp Ile Asp Ser Gln Gly Leu Gly Leu  
35 40 45  
Lys Pro Gly Thr Val Xaa Leu Ser Gly Ser Tyr Trp  
50 55 60

<210> 472  
<211> 398  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (391)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 472  
Asn Gln Leu Ser Ser Ile Met Val Met Phe Lys Lys Ile Lys Ser Phe  
1 5 10 15  
Glu Val Val Phe Asn Asp Pro Glu Lys Val Tyr Gly Ser Gly Glu Lys  
20 25 30  
Val Ala Gly Arg Val Ile Val Glu Val Cys Glu Val Thr Arg Val Lys  
35 40 45  
Ala Val Arg Ile Leu Ala Cys Gly Val Ala Lys Val Leu Trp Met Gln  
50 55 60  
Gly Ser Gln Gln Cys Lys Gln Thr Ser Glu Tyr Leu Arg Tyr Glu Asp

65		70		75		80									
Thr	Leu	Leu	Leu	Glu	Asp	Gln	Pro	Thr	Gly	Glu	Asn	Glu	Met	Val	Ile
				85					90					95	
Met	Arg	Pro	Gly	Asn	Lys	Tyr	Glu	Tyr	Lys	Phe	Gly	Phe	Glu	Leu	Pro
			100						105				110		
Gln	Gly	Pro	Leu	Gly	Thr	Ser	Phe	Lys	Gly	Lys	Tyr	Gly	Cys	Val	Asp
		115					120					125			
Tyr	Trp	Val	Lys	Ala	Phe	Leu	Asp	Arg	Pro	Ser	Gln	Pro	Thr	Gln	Glu
	130					135					140				
Thr	Lys	Lys	Asn	Phe	Glu	Val	Val	Asp	Leu	Val	Asp	Val	Asn	Thr	Pro
145					150					155					160
Asp	Leu	Met	Ala	Pro	Val	Ser	Ala	Lys	Lys	Glu	Lys	Lys	Val	Ser	Cys
			165					170						175	
Met	Phe	Ile	Pro	Asp	Gly	Arg	Val	Ser	Val	Ser	Ala	Arg	Ile	Asp	Arg
		180						185					190		
Lys	Gly	Phe	Cys	Glu	Gly	Asp	Glu	Ile	Ser	Ile	His	Ala	Asp	Phe	Glu
	195						200					205			
Asn	Thr	Cys	Ser	Arg	Ile	Val	Val	Pro	Lys	Ala	Ala	Ile	Val	Ala	Arg
	210					215					220				
His	Thr	Tyr	Leu	Ala	Asn	Gly	Gln	Thr	Lys	Val	Leu	Thr	Gln	Lys	Leu
225					230					235					240
Ser	Ser	Val	Arg	Gly	Asn	His	Ile	Ile	Ser	Gly	Thr	Cys	Ala	Ser	Trp
			245						250					255	
Arg	Gly	Lys	Ser	Leu	Arg	Val	Gln	Lys	Ile	Arg	Pro	Ser	Ile	Leu	Gly
		260						265					270		
Cys	Asn	Ile	Leu	Arg	Val	Glu	Tyr	Ser	Leu	Leu	Ile	Tyr	Val	Ser	Val
	275						280					285			
Pro	Gly	Ser	Lys	Lys	Val	Ile	Leu	Asp	Leu	Pro	Leu	Val	Ile	Gly	Ser
	290					295					300				
Arg	Ser	Gly	Leu	Ser	Ser	Arg	Thr	Ser	Ser	Met	Ala	Ser	Arg	Thr	Ser
305					310					315					320
Ser	Glu	Met	Ser	Trp	Val	Asp	Leu	Asn	Ile	Pro	Asp	Thr	Pro	Glu	Ala
			325						330					335	
Pro	Pro	Cys	Tyr	Met	Asp	Val	Ile	Pro	Glu	Asp	His	Arg	Leu	Glu	Ser

340	345	350
Pro Thr Thr Pro Leu Leu Asp Asp Met Asp Gly Ser Gln Asp Ser Pro		
355	360	365
Ile Phe Met Tyr Ala Pro Glu Phe Lys Phe Met Pro Pro Pro Thr Tyr		
370	375	380
Thr Glu Val Gly Ser Leu Xaa Ser Leu Leu Leu Asn Leu Ser		
385	390	395

&lt;210&gt; 473

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (234)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 473

Lys	Glu	Ala	Gly	Ala	Ala	Thr	Gly	Pro	Arg	Ala	Met	Trp	Leu	Cys	Pro
1				5				10					15		

Leu	Ala	Leu	Xaa	Leu	Ile	Leu	Met	Ala	Ala	Ser	Gly	Ala	Ala	Cys	Glu
		20						25					30		

Val	Lys	Asp	Val	Cys	Val	Gly	Ser	Pro	Gly	Ile	Pro	Gly	Thr	Pro	Gly
		35					40					45			

Ser	His	Gly	Leu	Pro	Gly	Arg	Asp	Gly	Arg	Asp	Gly	Xaa	Lys	Gly	Asp
	50					55					60				

Pro	Gly	Pro	Pro	Gly	Pro	Met	Gly	Pro	Pro	Gly	Glu	Thr	Pro	Cys	Pro
65					70					75					80

Pro	Gly	Asn	Asn	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Val	Pro	Gly	Glu	Arg
				85					90					95	

Gly Glu Lys Gly Glu Ala Gly Glu Arg Gly Pro Pro Gly Leu Pro Ala  
100 105 110

His Leu Asp Glu Glu Leu Gln Ala Thr Leu His Asp Phe Arg His Gln  
115 120 125

Ile Leu Gln Thr Arg Gly Ala Leu Ser Leu Gln Gly Ser Ile Met Thr  
130 135 140

Val Gly Glu Lys Val Phe Ser Ser Asn Gly Gln Ser Ile Thr Phe Asp  
145 150 155 160

Ala Ile Gln Glu Ala Cys Ala Arg Ala Gly Gly Arg Ile Ala Val Pro  
165 170 175

Arg Asn Pro Glu Glu Asn Glu Ala Ile Ala Ser Phe Val Lys Lys Tyr  
180 185 190

Asn Thr Tyr Ala Tyr Val Gly Leu Thr Glu Gly Pro Ser Pro Gly Asp  
195 200 205

Phe Arg Tyr Ser Asp Gly Thr Pro Val Asn Tyr Thr Asn Trp Tyr Arg  
210 215 220

Gly Glu Pro Ala Gly Arg Gly Lys Glu Xaa Cys Val Glu Met Tyr Thr  
225 230 235 240

Asp Gly Gln Trp Asn Asp Arg Asn Cys Leu Tyr Ser Arg Leu Thr Ile  
245 250 255

Cys Glu Phe

<210> 474  
<211> 231  
<212> PRT  
<213> Homo sapiens

<400> 474  
Gly Thr Val Pro Gly Lys Gly Gln Glu Tyr His Gly Met Gly Met Ser  
1 5 10 15

Ser Leu Lys Leu Leu Lys Tyr Val Leu Phe Phe Phe Asn Leu Leu Phe  
20 25 30

Trp Ile Cys Gly Cys Cys Ile Leu Gly Phe Gly Ile Tyr Leu Leu Ile  
35 40 45



His Asn Asn Phe Gly Val Leu Phe His Asn Leu Pro Ser Leu Thr Leu  
50 55 60

Gly Asn Val Phe Val Ile Val Gly Ser Ile Ile Met Val Val Ala Phe  
65 70 75 80

Leu Gly Cys Met Gly Ser Ile Lys Glu Asn Lys Cys Leu Leu Met Ser  
85 90 95

Phe Phe Ile Leu Leu Leu Ile Ile Leu Leu Ala Glu Val Thr Leu Ala  
100 105 110

Ile Leu Leu Phe Val Tyr Glu Gln Lys Leu Asn Glu Tyr Val Ala Lys  
115 120 125

Gly Leu Thr Asp Ser Ile His Arg Tyr His Ser Asp Asn Ser Thr Lys  
130 135 140

Ala Ala Trp Asp Ser Ile Gln Ser Phe Leu Gln Cys Cys Gly Ile Asn  
145 150 155 160

Gly Thr Ser Asp Trp Thr Ser Gly Pro Pro Ala Ser Cys Pro Ser Asp  
165 170 175

Arg Lys Val Glu Gly Cys Tyr Ala Lys Ala Arg Leu Trp Phe His Ser  
180 185 190

Asn Phe Leu Tyr Ile Gly Ile Ile Thr Ile Cys Val Cys Val Ile Glu  
195 200 205

Val Leu Gly Met Ser Phe Ala Leu Thr Leu Asn Cys Gln Ile Asp Lys  
210 215 220

Thr Ser Gln Thr Ile Gly Leu  
225 230

<210> 475

<211> 498

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (67)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (120)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 475

Gly	Thr	Ala	Asn	Glu	Ala	Pro	Trp	Xaa	Arg	Thr	Gln	Ser	Ser	Ala	Leu
1				5				10						15	

Ala	Gly	Pro	Ser	Arg	Ser	Arg	His	His	Gly	Phe	Leu	Gln	Ser	Ser	Ala
			20				25					30			

Gly	Gly	Ala	Ser	Thr	Leu	Gly	Leu	Pro	Ala	Ala	Arg	Gly	Lys	Asp	Phe
		35				40						45			

Asn	Val	Pro	Leu	Ser	Ile	Ser	Arg	Leu	Thr	Pro	Gly	Gly	Lys	Ala	Ala
	50					55					60				

Gln	Ala	Xaa	Val	Ala	Val	Gly	Asp	Trp	Val	Leu	Ser	Ile	Asp	Gly	Glu
65					70					75					80

Asn	Ala	Gly	Ser	Leu	Thr	His	Ile	Glu	Ala	Gln	Asn	Lys	Ile	Arg	Ala
				85				90						95	

Cys	Gly	Glu	Arg	Leu	Ser	Leu	Gly	Leu	Ser	Arg	Ala	Gln	Pro	Val	Gln
			100					105					110		

Ser	Lys	Pro	Gln	Lys	Ala	Xaa	Xaa	Leu	Pro	Cys	Pro	Pro	Ala	Leu	Pro
		115					120					125			

Gly	Cys	Val	Ser	Ala	Gln	Ala	Ser	Ala	Pro	Ala	Ala	Asp	Pro	Pro	Arg
	130					135					140				

Tyr	Thr	Phe	Ala	Pro	Ser	Val	Ser	Leu	Asn	Lys	Thr	Ala	Arg	Pro	Phe
145					150					155					160

Gly	Ala	Pro	Pro	Pro	Ala	Asp	Ser	Ala	Pro	Gln	Gln	Asn	Gly	Gln	Pro
				165					170					175	

Leu	Arg	Pro	Leu	Val	Pro	Asp	Ala	Ser	Lys	Gln	Arg	Leu	Met	Glu	Asn
		180						185					190		

Thr	Glu	Asp	Trp	Arg	Pro	Arg	Pro	Gly	Thr	Gly	Gln	Ser	Arg	Ser	Phe
		195					200					205			

Arg Ile Leu Ala His Leu Thr Gly Thr Glu Phe Met Gln Asp Pro Asp  
 210 215 220  
 Glu Glu His Leu Lys Lys Ser Ser Gln Val Pro Arg Thr Glu Ala Pro  
 225 230 235 240  
 Ala Pro Ala Ser Ser Thr Pro Gln Glu Pro Trp Pro Gly Pro Thr Ala  
 245 250 255  
 Pro Ser Pro Thr Ser Arg Pro Pro Trp Ala Val Asp Pro Ala Phe Ala  
 260 265 270  
 Glu Arg Tyr Ala Pro Asp Lys Thr Ser Thr Val Leu Thr Arg His Ser  
 275 280 285  
 Gln Pro Ala Thr Pro Thr Pro Leu Gln Ser Arg Thr Ser Ile Val Gln  
 290 295 300  
 Ala Ala Ala Gly Gly Val Pro Gly Gly Gly Ser Asn Asn Gly Lys Thr  
 305 310 315 320  
 Pro Val Cys His Gln Cys His Lys Val Ile Arg Gly Arg Tyr Leu Val  
 325 330 335  
 Ala Leu Gly His Ala Tyr His Pro Glu Glu Phe Val Cys Ser Gln Cys  
 340 345 350  
 Gly Lys Val Leu Glu Glu Gly Gly Phe Phe Glu Glu Lys Gly Ala Ile  
 355 360 365  
 Phe Cys Pro Pro Cys Tyr Asp Val Arg Tyr Ala Pro Ser Cys Ala Lys  
 370 375 380  
 Cys Lys Lys Lys Ile Thr Gly Glu Ile Met His Ala Leu Lys Met Thr  
 385 390 395 400  
 Trp His Val His Cys Phe Thr Cys Ala Ala Cys Lys Thr Pro Ile Arg  
 405 410 415  
 Asn Arg Ala Phe Tyr Met Glu Glu Gly Val Pro Tyr Cys Glu Arg Asp  
 420 425 430  
 Tyr Glu Lys Met Phe Gly Thr Lys Cys His Gly Cys Asp Phe Lys Ile  
 435 440 445  
 Asp Ala Gly Asp Arg Phe Leu Glu Ala Leu Gly Phe Ser Trp His Asp  
 450 455 460  
 Thr Cys Phe Val Cys Ala Ile Cys Gln Ile Asn Leu Glu Gly Lys Thr  
 465 470 475 480

Phe Tyr Ser Lys Lys Asp Arg Pro Leu Cys Lys Ser His Ala Phe Ser  
                   485                                  490                                  495

His Val

<210> 476

<211> 268

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (164)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 476

Gln Glu Ala Ala Ser Leu Gly Ala Val Thr Ser Cys Gly Gln Glu Ser  
   1                  5                                  10                                  15

Leu Ser Arg Ala Ser Pro Arg Ser Leu Ser Arg Phe Leu Leu Thr Ala  
                   20                                  25                                  30

His Pro Pro Ala Ala Ala Met Arg His Leu Gly Ala Phe Leu Phe Leu  
                   35                                  40                                  45

Leu Gly Val Leu Gly Ala Leu Thr Glu Met Cys Glu Ile Pro Glu Met  
   50                                  55                                  60

Asp Ser His Leu Val Glu Lys Leu Gly Gln His Leu Leu Pro Trp Met  
   65                                  70                                  75                                  80

Asp Arg Leu Ser Leu Glu His Leu Asn Pro Ser Ile Tyr Val Gly Leu  
                   85                                  90                                  95

Arg Leu Ser Ser Leu Gln Ala Gly Thr Lys Glu Asp Leu Tyr Leu His  
                   100                                  105                                  110

Ser Leu Lys Leu Gly Tyr Gln Gln Cys Leu Leu Gly Ser Ala Phe Ser  
115 120 125

Glu Asp Asp Gly Asp Cys Gln Gly Lys Pro Ser Met Gly Gln Leu Ala  
130 135 140

Ser Xaa Leu Leu Ala Leu Arg Ala Asn Cys Glu Phe Val Xaa Gly His  
145 150 155 160

Lys Gly Asp Xaa Leu Val Ser Gln Leu Lys Trp Phe Leu Glu Asp Glu  
165 170 175

Lys Arg Ala Ile Gly His Asp His Lys Gly His Pro His Thr Ser Tyr  
180 185 190

Tyr Gln Tyr Gly Leu Gly Ile Leu Ala Leu Cys Leu His Gln Lys Arg  
195 200 205

Val His Asp Ser Val Val Asp Lys Leu Leu Tyr Ala Val Glu Pro Phe  
210 215 220

His Gln Gly His His Ser Val Asp Thr Ala Ala Met Ala Gly Leu Ala  
225 230 235 240

Phe Thr Cys Leu Lys Arg Ser Asn Phe Asn Pro Gly Arg Arg His Gly  
245 250 255

Ser Pro Trp Pro Ser Glu Gln Cys Glu Arg Arg Ser  
260 265

<210> 477

<211> 549

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (217)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (224)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 477

Ile Leu Glu Phe Pro Val Glu Glu Gln Asp Arg Val Leu Ser Phe Arg  
1 5 10 15

Cys Gln Ala Arg Ile Ile Ser Gly Ile His Met Gln Thr Ser Glu Ser  
                   20                  25                  30  
 Thr Lys Ser Glu Leu Val Thr Val Thr Glu Ser Phe Ser Thr Pro Lys  
                   35                  40                  45  
 Phe His Ile Ser Pro Thr Gly Met Ile Met Glu Gly Ala Gln Leu His  
                   50                  55                  60  
 Ile Lys Cys Thr Ile Gln Val Thr His Leu Ala Gln Glu Phe Pro Glu  
                   65                  70                  75                  80  
 Ile Ile Ile Gln Lys Asp Lys Ala Ile Val Ala His Asn Arg His Gly  
                   85                  90                  95  
 Asn Lys Ala Val Tyr Ser Val Met Ala Met Val Glu His Ser Gly Asn  
                   100                  105                  110  
 Tyr Thr Cys Lys Val Glu Ser Ser Arg Ile Ser Lys Val Ser Ser Ile  
                   115                  120                  125  
 Val Val Asn Ile Thr Glu Leu Phe Ser Lys Pro Glu Leu Glu Ser Ser  
                   130                  135                  140  
 Phe Thr His Leu Asp Gln Gly Glu Arg Leu Asn Leu Ser Cys Ser Ile  
                   145                  150                  155                  160  
 Pro Gly Ala Pro Pro Ala Asn Phe Thr Ile Gln Lys Glu Asp Thr Ile  
                   165                  170                  175  
 Val Ser Gln Thr Gln Asp Phe Thr Lys Ile Ala Ser Lys Ser Asp Ser  
                   180                  185                  190  
 Gly Thr Tyr Ile Cys Thr Ala Gly Ile Asp Lys Val Val Lys Lys Ser  
                   195                  200                  205  
 Asn Thr Val Gln Ile Val Val Cys Xaa Met Leu Ser Gln Pro Arg Xaa  
                   210                  215                  220  
 Ser Tyr Asp Ala Gln Phe Glu Val Ile Lys Gly Gln Thr Ile Glu Val  
                   225                  230                  235                  240  
 Arg Cys Glu Ser Ile Ser Gly Thr Leu Pro Ile Ser Tyr Gln Leu Leu  
                   245                  250                  255  
 Lys Thr Ser Lys Val Leu Glu Asn Ser Thr Lys Asn Ser Asn Asp Pro  
                   260                  265                  270  
 Ala Val Phe Lys Asp Asn Pro Thr Glu Asp Val Glu Tyr Gln Cys Val  
                   275                  280                  285

Ala Asp Asn Cys His Ser His Ala Lys Met Leu Ser Glu Val Leu Arg  
 290 295 300  
 Val Lys Val Ile Ala Pro Val Asp Glu Val Gln Ile Ser Ile Leu Ser  
 305 310 315 320  
 Ser Lys Val Val Glu Ser Gly Glu Asp Ile Val Leu Gln Cys Ala Val  
 325 330 335  
 Asn Glu Gly Ser Gly Pro Ile Thr Tyr Lys Phe Tyr Arg Glu Lys Glu  
 340 345 350  
 Gly Lys Pro Phe Tyr Gln Met Thr Ser Asn Ala Thr Gln Ala Phe Trp  
 355 360 365  
 Thr Lys Gln Lys Ala Ser Lys Glu Gln Glu Gly Glu Tyr Tyr Cys Thr  
 370 375 380  
 Ala Phe Asn Arg Ala Asn His Ala Ser Ser Val Pro Arg Ser Lys Ile  
 385 390 395 400  
 Leu Thr Val Arg Val Ile Leu Ala Pro Trp Lys Lys Gly Leu Ile Ala  
 405 410 415  
 Val Val Ile Ile Gly Val Ile Ile Ala Leu Leu Ile Ile Ala Ala Lys  
 420 425 430  
 Cys Tyr Phe Leu Arg Lys Ala Lys Ala Lys Gln Met Pro Val Glu Met  
 435 440 445  
 Ser Arg Pro Ala Val Pro Leu Leu Asn Ser Asn Asn Glu Lys Met Ser  
 450 455 460  
 Asp Pro Asn Met Glu Ala Asn Ser His Tyr Gly His Asn Asp Asp Val  
 465 470 475 480  
 Arg Asn His Ala Met Lys Pro Ile Asn Asp Asn Lys Glu Pro Leu Asn  
 485 490 495  
 Ser Asp Val Gln Tyr Thr Glu Val Gln Val Ser Ser Ala Glu Ser His  
 500 505 510  
 Lys Asp Leu Gly Lys Lys Asp Thr Glu Thr Val Tyr Ser Glu Val Arg  
 515 520 525  
 Lys Ala Val Pro Asp Ala Val Glu Ser Arg Tyr Ser Arg Thr Glu Gly  
 530 535 540  
 Ser Leu Asp Gly Thr  
 545

&lt;210&gt; 478

&lt;211&gt; 364

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 478

Gly Arg Val Gly Gly Arg Val Gly Gly Pro Trp Val Ala Ala Thr Ser  
 1 5 10 15

Ala Asp Pro Glu Arg Lys Ser Gln Ala Ala Ser Ala Ala Met Trp Ala  
 20 25 30

Thr Leu Pro Leu Leu Cys Ala Gly Ala Trp Leu Leu Gly Val Pro Val  
 35 40 45

Cys Gly Ala Ala Glu Leu Ser Val Asn Ser Leu Glu Lys Phe His Phe  
 50 55 60

Lys Ser Trp Met Ser Lys His Arg Lys Thr Tyr Ser Thr Glu Glu Tyr  
 65 70 75 80

His His Arg Leu Gln Thr Phe Ala Ser Asn Trp Arg Lys Ile Asn Ala  
 85 90 95

His Asn Asn Gly Asn His Thr Phe Lys Met Ala Leu Asn Gln Phe Ser  
 100 105 110

Asp Met Ser Phe Ala Glu Ile Lys His Lys Tyr Leu Trp Ser Glu Pro  
 115 120 125

Gln Asn Cys Ser Ala Thr Lys Ser Asn Tyr Leu Arg Gly Thr Gly Pro  
 130 135 140

Tyr Pro Pro Ser Val Asp Trp Arg Lys Lys Gly Asn Phe Val Ser Pro  
 145 150 155 160

Val Lys Asn Gln Gly Ala Cys Gly Ser Cys Trp Thr Phe Ser Thr Thr  
 165 170 175

Gly Ala Leu Glu Ser Ala Ile Ala Ile Ala Thr Gly Lys Met Leu Ser  
 180 185 190

Leu Ala Glu Gln Gln Leu Val Asp Cys Ala Gln Asp Phe Asn Asn His  
 195 200 205

Gly Cys Gln Gly Gly Leu Pro Ser Gln Ala Phe Glu Tyr Ile Leu Tyr  
 210 215 220

Asn Lys Gly Ile Met Gly Glu Asp Thr Tyr Pro Tyr Gln Gly Lys Asp



225		230		235		240
Gly Tyr Cys Lys Phe Gln Pro Gly Lys Ala Ile Gly Phe Val Lys Asp						
	245		250		255	
Val Ala Asn Ile Thr Ile Tyr Asp Glu Glu Ala Met Val Glu Ala Val						
	260		265		270	
Ala Leu Tyr Asn Pro Val Ser Phe Ala Phe Glu Val Thr Gln Asp Phe						
	275		280		285	
Met Met Tyr Arg Thr Gly Ile Tyr Ser Ser Thr Ser Cys His Lys Thr						
	290		295		300	
Pro Asp Lys Val Asn His Ala Val Leu Ala Val Gly Tyr Gly Glu Lys						
305		310		315		320
Asn Gly Ile Pro Tyr Trp Ile Val Lys Asn Ser Trp Gly Pro Gln Trp						
	325		330		335	
Gly Met Asn Gly Tyr Phe Leu Ile Glu Arg Gly Lys Asn Met Cys Gly						
	340		345		350	
Leu Ala Ala Cys Ala Ser Tyr Pro Ile Pro Leu Val						
	355		360			

&lt;210&gt; 479

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (266)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (271)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (388)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 479

Ser Thr His Ala Ser Ala His Ala Ser Ala Ala Thr Gln Ser Cys Asn

1

5

10

15

Leu Ser Leu Ala Met Ala Pro Ser Ser Pro Arg Pro Ala Leu Pro Ala  
 20 25 30

Leu Leu Val Leu Leu Gly Ala Leu Phe Pro Gly Pro Gly Asn Ala Gln  
 35 40 45

Thr Ser Val Ser Pro Ser Lys Val Ile Leu Pro Arg Gly Gly Ser Val  
 50 55 60

Leu Val Thr Cys Ser Thr Ser Cys Asp Gln Pro Lys Leu Leu Gly Ile  
 65 70 75 80

Glu Thr Pro Leu Pro Lys Lys Glu Leu Leu Leu Pro Gly Asn Asn Arg  
 85 90 95

Lys Val Tyr Glu Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met Cys  
 100 105 110

Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu Thr  
 115 120 125

Val Tyr Trp Thr Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser Trp  
 130 135 140

Gln Pro Val Gly Lys Asn Leu Thr Leu Arg Cys Gln Val Glu Gly Gly  
 145 150 155 160

Ala Pro Arg Ala Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys Glu  
 165 170 175

Leu Lys Arg Glu Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr Thr  
 180 185 190

Val Leu Val Arg Arg Asp His His Gly Ala Asn Phe Ser Cys Arg Thr  
 195 200 205

Glu Leu Asp Leu Arg Pro Gln Gly Leu Glu Leu Phe Glu Asn Thr Ser  
 210 215 220

Ala Pro Tyr Gln Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro Gln  
 225 230 235 240

Leu Val Ser Pro Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val Val  
 245 250 255

Cys Ser Leu Asp Gly Leu Phe Pro Val Xaa Glu Ala Gln Val Xaa Leu  
 260 265 270

Ala Leu Gly Asp Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn Asp  
 275 280 285

Ser Phe Ser Ala Lys Ala Ser Val Ser Val Thr Ala Glu Asp Glu Gly  
 290 295 300  
 Thr Gln Arg Leu Thr Cys Ala Val Ile Leu Gly Asn Gln Ser Gln Glu  
 305 310 315 320  
 Thr Leu Gln Thr Val Thr Ile Tyr Ser Phe Pro Ala Pro Asn Val Ile  
 325 330 335  
 Leu Thr Lys Pro Glu Val Ser Glu Gly Thr Glu Val Thr Val Lys Cys  
 340 345 350  
 Glu Ala His Pro Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala Gln  
 355 360 365  
 Pro Leu Gly Pro Arg Ala Ser Cys Leu Leu Lys Ala Thr Pro Glu Asp  
 370 375 380  
 Asn Gly Arg Xaa Ser Pro Ala Leu Gln Pro Trp Arg Trp Pro Ala Ser  
 385 390 395 400  
 Leu Tyr Thr Arg Thr Arg Pro Gly Ser Phe Val Ser Cys Met Ala Pro  
 405 410 415  
 Asp Trp Thr Arg Gly Ile Val Arg Glu Thr Gly Arg Gly Gln Lys Ile  
 420 425 430  
 Pro Ser Arg Leu Gln Cys Ala Arg Leu Gly Gly Thr His Cys Pro Ser  
 435 440 445  
 Ser Ser Val  
 450

&lt;210&gt; 480

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 480

Gly Tyr Cys Thr His Pro Ser Phe Ile Ser Leu Gln His Leu Phe Leu  
 1 5 10 15  
 Glu Gly Val Asn Thr Asn Ser Ser Asp Leu Gly Ser Leu Pro Glu Lys  
 20 25 30  
 Met Gln Pro Phe Leu Leu Leu Leu Ala Phe Leu Leu Thr Pro Gly Ala  
 35 40 45

Gly Thr Glu Glu Ile Ile Gly Gly His Glu Ala Lys Pro His Ser Arg  
 50 55 60  
 Pro Tyr Met Ala Phe Val Gln Phe Leu Gln Glu Lys Ser Arg Lys Arg  
 65 70 75 80  
 Cys Gly Gly Ile Leu Val Arg Lys Asp Phe Val Leu Thr Ala Ala His  
 85 90 95  
 Cys Gln Gly Ser Ser Ile Asn Val Thr Leu Gly Ala His Asn Ile Lys  
 100 105 110  
 Glu Gln Glu Arg Thr Gln Gln Phe Ile Pro Val Lys Arg Pro Ile Pro  
 115 120 125  
 His Pro Ala Tyr Asn Pro Lys Asn Phe Ser Asn Asp Ile Met Leu Leu  
 130 135 140  
 Gln Leu Glu Arg Lys Ala Lys Trp Thr Thr Ala Val Arg Pro Leu Arg  
 145 150 155 160  
 Leu Pro Ser Ser Lys Ala Gln Val Lys Pro Gly Gln Leu Cys Ser Val  
 165 170 175  
 Ala Gly Trp Gly Tyr Val Ser Met Ser Thr Leu Ala Thr Thr Leu Gln  
 180 185 190  
 Glu Val Leu Leu Thr Val Gln Lys Asp Cys Gln Cys Glu Arg Leu Phe  
 195 200 205  
 His Gly Asn Tyr Ser Arg Ala Thr Glu Ile Cys Val Gly Asp Pro Lys  
 210 215 220  
 Lys Thr Gln Thr Gly Phe Lys Gly Asp Ser Gly Gly Pro Leu Val Cys  
 225 230 235 240  
 Lys Asp Val Ala Gln Gly Ile Leu Ser Tyr Gly Asn Lys Lys Gly Thr  
 245 250 255  
 Pro Pro Gly Val Tyr Ile Lys Val Ser His Phe Leu Pro Trp Ile Lys  
 260 265 270  
 Arg Thr Met Lys Arg Leu  
 275

&lt;210&gt; 481

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (79)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 481

Asn	Ser	Leu	Ser	Pro	Ser	Pro	Trp	Ser	His	Trp	Leu	Ser	Ala	Ala	Ala
1				5					10					15	

Pro	Leu	Leu	Gln	Arg	Ser	Ala	Arg	Ala	Phe	Ser	Val	Val	Ile	Glu	Thr
			20					25					30		

Leu	Leu	Met	Asp	Thr	Pro	Ser	Ser	Tyr	Glu	Ala	Ala	Met	Glu	Leu	Phe
		35					40					45			

Ser	Pro	Asp	Gln	Asp	Met	Arg	Glu	Ala	Gly	Ala	Gln	Leu	Lys	Lys	Leu
	50					55					60				

Val	Asp	Thr	Leu	Pro	Gln	Lys	Pro	Arg	Glu	Ser	Ile	Ile	Lys	Xaa	Met
65					70					75					80

Gly	Lys	Asn	Ser	Pro	Lys	Leu	Thr	Val	Leu	Ile	Arg	His	Phe	Arg	Lys
				85					90					95	

Leu	Glu	Asp	Pro	Pro	Thr	Gly	Ser	Ser	Leu	Leu	Pro	Leu	Pro	Trp	Phe
			100					105					110		

Leu	Glu	Phe	His	Gly	Pro	Pro
						115

&lt;210&gt; 482

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 482

Lys	Val	Arg	Leu	Xaa	Val	Pro	Xaa	Arg	Asn	Ser	Arg	Val	Asp	Pro	Arg
1					5				10					15	

Val Arg Glu His Ser Thr Cys Ser Lys Met Asp Val Gly Ser Lys Glu  
                     20                    25                    30

Val Leu Met Glu Ser Pro Pro Asp Tyr Ser Ala Ala Pro Arg Gly Arg  
                     35                    40                    45

Phe Gly Ile Pro Cys Cys Pro Val His Leu Lys Arg Leu Leu Ile Val  
                     50                    55                    60

Val Val Val Val Val Leu Ile Val Val Val Ile Val Gly Ala Leu Leu  
                     65                    70                    75                    80

Met Gly Leu His Met Ser Gln Lys His Thr Glu Met Val Leu Glu Met  
                     85                    90                    95

Ser Ile Gly Ala Pro Glu Ala Gln Gln Arg Leu Ala Leu Ser Glu His  
                     100                    105                    110

Leu Val Thr Thr Ala Thr Phe Ser Ile Gly Ser Thr Gly Leu Val Val  
                     115                    120                    125

Tyr Asp Tyr Gln Gln Leu Leu Ile Ala Tyr Lys Pro Ala Pro Gly Thr  
                     130                    135                    140

Cys Cys Tyr Ile Met Lys Ile Ala Pro Glu Ser Ile Pro Ser Leu Glu  
                     145                    150                    155                    160

Ala Leu Thr Arg Lys Val His Asn Phe Gln Ala Lys Pro Ala Val Pro  
                     165                    170                    175

Thr Ser Lys Leu Gly Gln Ala Glu Gly Arg Asp Ala Gly Ser Ala Pro  
                     180                    185                    190

Ser Gly Gly Asp Pro Ala Phe Leu Gly Met Ala Val Ser Thr Leu Cys  
                     195                    200                    205

Gly Glu Val Pro Leu Tyr Tyr Ile  
                     210                    215

&lt;210&gt; 483

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 483

Gly Ser Gln Glu Met Thr Ala Asp Leu Ser Pro Glu Gly Phe Met Leu  
                     1                    5                    10                    15

Gly Val Glu Gly Ile Leu Leu Arg Leu Leu Gly Tyr Gln Glu Thr Gln  
                   20                  25                  30

Pro Phe Pro Cys Glu Tyr Leu Ile Leu Leu Leu Val Ser Val Gln Leu  
           35                  40                  45

Leu Leu Asn Asn Arg Gln His Glu Glu  
       50                  55

<210> 484

<211> 332

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (204)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 484

Leu Ala Cys Val Ser Pro Trp Met Asp Met Trp Thr Ala Leu Leu Ile  
   1                  5                  10                  15

Leu Gln Ala Leu Leu Leu Pro Ser Leu Ala Asp Gly Ala Thr Pro Ala  
           20                  25                  30

Leu Arg Phe Val Ala Val Gly Asp Trp Gly Gly Val Pro Asn Ala Pro  
           35                  40                  45

Phe His Thr Ala Arg Glu Met Ala Asn Ala Lys Glu Ile Ala Arg Thr  
       50                  55                  60

Val Gln Ile Leu Gly Ala Asp Phe Ile Leu Ser Leu Gly Asp Asn Phe  
       65                  70                  75                  80

Tyr Phe Thr Gly Val Gln Asp Ile Asn Asp Lys Arg Phe Gln Glu Thr  
           85                  90                  95

Phe Glu Asp Val Phe Ser Asp Arg Ser Leu Arg Lys Val Pro Trp Tyr  
           100                  105                  110

Val Leu Ala Gly Asn His Asp His Leu Gly Asn Val Ser Ala Gln Ile  
       115                  120                  125

Ala Tyr Ser Lys Ile Ser Lys Arg Trp Asn Phe Pro Ser Pro Phe Tyr  
       130                  135                  140

Arg Leu His Phe Lys Ile Pro Gln Thr Asn Val Ser Val Ala Ile Phe  
       145                  150                  155                  160

Met Leu Asp Thr Val Thr Leu Cys Gly Asn Ser Asp Asp Phe Leu Ser  
165 170 175

Gln Gln Pro Glu Arg Pro Arg Asp Val Lys Leu Ala Arg Thr Gln Leu  
180 185 190

Ser Trp Leu Lys Lys Gln Leu Ala Ala Ala Arg Xaa Asp Tyr Val Leu  
195 200 205

Val Ala Gly His Tyr Pro Val Trp Ser Ile Ala Glu His Gly Pro Thr  
210 215 220

His Cys Leu Val Lys Gln Leu Arg Pro Leu Leu Ala Thr Tyr Gly Val  
225 230 235 240

Thr Ala Tyr Leu Cys Gly His Asp His Asn Leu Gln Tyr Leu Gln Asp  
245 250 255

Glu Asn Gly Val Gly Tyr Val Leu Ser Gly Ala Gly Asn Phe Met Asp  
260 265 270

Pro Ser Lys Arg His Gln Arg Lys Val Pro Asn Gly Tyr Leu Arg Phe  
275 280 285

His Tyr Gly Thr Glu Asp Ser Leu Gly Gly Phe Ala Tyr Val Glu Ile  
290 295 300

Ser Ser Lys Glu Met Thr Val Thr Tyr Ile Glu Ala Ser Gly Lys Ser  
305 310 315 320

Leu Phe Lys Thr Arg Leu Pro Arg Arg Ala Arg Pro  
325 330

<210> 485

<211> 431

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (263)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (264)

<223> Xaa equals any of the naturally occurring L-amino acids



&lt;400&gt; 485

```

Ser Thr Ser Arg Ala Cys Pro Glu Leu Arg Gly Ser Glu Asp Leu Ser
  1              5              10              15

Thr Met Glu Arg Ala Ser Cys Leu Leu Leu Leu Leu Leu Pro Leu Val
      20              25              30

His Val Ser Ala Thr Thr Pro Glu Pro Cys Glu Leu Asp Asp Glu Asp
      35              40              45

Phe Arg Cys Val Cys Asn Phe Ser Glu Pro Gln Pro Asp Trp Ser Glu
      50              55              60

Ala Phe Gln Cys Val Ser Ala Val Glu Val Glu Ile His Ala Gly Gly
  65              70              75              80

Leu Asn Leu Glu Pro Phe Leu Lys Arg Val Asp Ala Asp Ala Asp Pro
      85              90              95

Arg Gln Tyr Ala Asp Thr Val Lys Ala Leu Arg Val Arg Arg Leu Thr
      100             105             110

Val Gly Ala Ala Gln Val Pro Ala Gln Leu Leu Val Gly Ala Leu Arg
      115             120             125

Val Leu Ala Tyr Ser Arg Leu Lys Glu Leu Thr Leu Glu Asp Leu Lys
      130             135             140

Ile Thr Gly Thr Met Pro Pro Leu Pro Leu Glu Ala Thr Gly Leu Ala
  145             150             155             160

Leu Ser Ser Leu Arg Leu Arg Asn Val Ser Trp Ala Thr Gly Arg Ser
      165             170             175

Trp Leu Ala Glu Leu Gln Gln Trp Leu Lys Pro Gly Leu Lys Val Leu
      180             185             190

Ser Ile Ala Gln Ala His Ser Pro Ala Phe Ser Cys Glu Gln Val Arg
      195             200             205

Ala Phe Pro Ala Leu Thr Ser Leu Asp Leu Ser Asp Asn Pro Gly Leu
      210             215             220

Gly Glu Arg Gly Leu Met Ala Ala Leu Cys Pro His Lys Phe Pro Ala
  225             230             235             240

Ile Gln Asn Leu Ala Leu Arg Asn Thr Gly Met Glu Thr Pro Thr Gly
      245             250             255

Val Cys Ala Ala Leu Ala Xaa Xaa Gly Val Gln Pro His Ser Leu Asp
      260             265             270

```

Leu Ser His Asn Ser Leu Arg Ala Thr Val Asn Pro Ser Ala Pro Arg  
 275 280 285  
 Cys Met Trp Ser Ser Ala Leu Asn Ser Leu Asn Leu Ser Phe Ala Gly  
 290 295 300  
 Leu Glu Gln Val Pro Lys Gly Leu Pro Ala Lys Leu Arg Val Leu Asp  
 305 310 315 320  
 Leu Ser Cys Asn Arg Leu Asn Arg Ala Pro Gln Pro Asp Glu Leu Pro  
 325 330 335  
 Glu Val Asp Asn Leu Thr Leu Asp Gly Asn Pro Phe Leu Val Pro Gly  
 340 345 350  
 Thr Ala Leu Pro His Glu Gly Ser Met Asn Ser Gly Val Val Pro Ala  
 355 360 365  
 Cys Ala Arg Ser Thr Leu Ser Val Gly Val Ser Gly Thr Leu Val Leu  
 370 375 380  
 Leu Gln Gly Ala Arg Ala Leu Pro Lys Ile Gln Asp Arg Ile Met Asn  
 385 390 395 400  
 Gly Leu Lys Leu Pro Trp Leu Gln Gly Ser Pro Val Arg Thr Leu Arg  
 405 410 415  
 Thr Phe Arg Pro Ile Gln Pro Phe Ala Pro Pro Leu Leu Lys Ser  
 420 425 430

&lt;210&gt; 486

&lt;211&gt; 510

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (145)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 486

His Glu Glu Thr Gln Ser Phe Ser Ser Ala Lys Met Lys His Ser Leu  
 1 5 10 15

Asn Ala Leu Leu Ile Phe Leu Ile Ile Thr Ser Ala Trp Gly Gly Ser  
 20 25 30

Lys Gly Pro Leu Asp Gln Leu Glu Lys Gly Gly Glu Thr Ala Gln Ser

35	40	45
Ala Asp Pro Gln Trp Glu Gln Leu Asn Asn Lys Asn Leu Ser Met Pro		
50	55	60
Leu Leu Pro Ala Asp Phe His Lys Glu Asn Thr Val Thr Asn Asp Trp		
65	70	75 80
Ile Pro Glu Gly Glu Glu Asp Asp Asp Tyr Leu Asp Leu Glu Lys Ile		
	85	90 95
Phe Ser Glu Asp Asp Asp Tyr Ile Asp Ile Val Asp Ser Leu Ser Val		
	100	105 110
Ser Pro Thr Asp Ser Asp Val Ser Ala Gly Asn Ile Leu Gln Leu Phe		
	115	120 125
His Gly Lys Ser Arg Ile Gln Arg Leu Asn Ile Leu Asn Ala Lys Phe		
	130	135 140
Xaa Phe Asn Leu Tyr Arg Val Leu Lys Asp Gln Val Asn Thr Phe Asp		
145	150	155 160
Asn Ile Phe Ile Ala Pro Val Gly Ile Ser Thr Ala Met Gly Met Ile		
	165	170 175
Ser Leu Gly Leu Lys Gly Glu Thr His Glu Gln Val His Ser Ile Leu		
	180	185 190
His Phe Lys Asp Phe Val Asn Ala Ser Ser Lys Tyr Glu Ile Thr Thr		
	195	200 205
Ile His Asn Leu Phe Arg Lys Leu Thr His Arg Leu Phe Arg Arg Asn		
	210	215 220
Phe Gly Tyr Thr Leu Arg Ser Val Asn Asp Leu Tyr Ile Gln Lys Gln		
225	230	235 240
Phe Pro Ile Leu Leu Asp Phe Lys Thr Lys Val Arg Glu Tyr Tyr Phe		
	245	250 255
Ala Glu Ala Gln Ile Ala Asp Phe Ser Asp Pro Ala Phe Ile Ser Lys		
	260	265 270
Thr Asn Asn His Ile Met Lys Leu Thr Lys Gly Leu Ile Lys Asp Ala		
	275	280 285
Leu Glu Asn Ile Asp Pro Ala Thr Gln Met Met Ile Leu Asn Cys Ile		
	290	295 300
Tyr Phe Lys Gly Ser Trp Val Asn Lys Phe Pro Val Glu Met Thr His		

305		310		315		320
Asn His Asn Phe Arg Leu Asn Glu Arg Glu Val Val Lys Val Ser Met						
		325		330		335
Met Gln Thr Lys Gly Asn Phe Leu Ala Ala Asn Asp Gln Glu Leu Asp						
		340		345		350
Cys Asp Ile Leu Gln Leu Glu Tyr Val Gly Gly Ile Ser Met Leu Ile						
		355		360		365
Val Val Pro His Lys Met Ser Gly Met Lys Thr Leu Glu Ala Gln Leu						
		370		375		380
Thr Pro Arg Val Val Glu Arg Trp Gln Lys Ser Met Thr Asn Arg Thr						
		385		390		400
Arg Glu Val Leu Leu Pro Lys Phe Lys Leu Glu Lys Asn Tyr Asn Leu						
		405		410		415
Val Glu Ser Leu Lys Leu Met Gly Ile Arg Met Leu Phe Asp Lys Asn						
		420		425		430
Gly Asn Met Ala Gly Ile Ser Asp Gln Arg Ile Ala Ile Asp Leu Phe						
		435		440		445
Lys His Gln Gly Thr Ile Thr Val Asn Glu Glu Gly Thr Gln Ala Thr						
		450		455		460
Thr Val Thr Thr Val Gly Phe Met Pro Leu Ser Thr Gln Val Arg Phe						
		465		470		480
Thr Val Asp Arg Pro Phe Leu Phe Leu Ile Tyr Glu His Arg Thr Ser						
		485		490		495
Cys Leu Leu Phe Met Gly Arg Val Ala Asn Pro Ser Arg Ser						
		500		505		510

&lt;210&gt; 487

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (106)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 487

```

His Leu Arg Arg Gln Gln Asp Thr Leu Ser Thr Ala Leu Gln Trp Leu
 1              5              10              15
.
Leu Leu Leu Phe Thr Arg Tyr Pro Asp Val Gln Thr Arg Val Gln Ala
      20              25              30
Glu Leu Asp Gln Val Val Gly Arg Asp Arg Leu Pro Cys Met Gly Asp
      35              40              45
Gln Pro Asn Leu Pro Tyr Val Leu Ala Phe Leu Tyr Glu Ala Met Arg
      50              55              60
Phe Ser Ser Phe Val Pro Val Thr Ile Pro His Ala Thr Thr Ala Asn
 65              70              75              80
Thr Ser Val Leu Gly Tyr His Ile Pro Lys Asp Thr Val Val Phe Val
      85              90              95
Asn Gln Trp Ser Val Asn His Asp Pro Xaa Lys Trp Pro Asn Pro Glu
      100              105              110
Asn Phe Asp Pro Ala Arg Phe Leu Asp Lys Asp Gly Leu Ile Asn Lys
      115              120              125
Asp Leu Thr Ser Arg Val Met Ile Phe Ser Val Gly Lys Arg Arg Cys
      130              135              140
Ile Gly Glu Glu Leu Ser Lys Met Gln Leu Phe Leu Phe Ile Ser Ile
 145              150              155              160
Leu Ala His Gln Cys Asp Phe Arg Ala Asn Pro Asn Glu Pro Ala Lys
      165              170              175
Met Asn Phe Ser Tyr Gly Leu Thr Ile Lys Pro Lys Cys Ile
      180              185              190

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&lt;210&gt; 488

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 488

```

Lys Met Gln Ala Pro Ala Phe Arg Asp Lys Lys Gln Gly Val Ser Ala
 1              5              10              15

```

Lys Asn Gln Gly Ala His Asp Pro Asp Tyr Glu Asn Ile Thr Leu Ala  
                   20                  25                  30  
 Phe Lys Asn Gln Asp His Ala Lys Gly Gly His Ser Arg Pro Thr Ser  
                   35                  40                  45  
 Gln Val Pro Ala Gln Cys Arg Pro Pro Ser Asp Ser Thr Gln Val Pro  
                   50                  55                  60  
 Cys Trp Leu Tyr Arg Ala Ile Leu Ser Leu Tyr Ile Leu Leu Ala Leu  
                   65                  70                  75                  80  
 Ala Phe Val Leu Cys Ile Ile Leu Ser Ala Phe Ile Met Val Lys Asn  
                   85                  90                  95  
 Ala Glu Met Ser Lys Glu Leu Leu Gly Phe Lys Arg Glu Leu Trp Asn  
                   100                  105                  110  
 Val Ser Asn Ser Val Gln Ala Cys Glu Glu Arg Gln Lys Arg Gly Trp  
                   115                  120                  125  
 Xaa Ser Val Gln Gln Ser Ile Thr Met Val Arg Ser Lys Ile Asp Arg  
                   130                  135                  140  
 Leu Glu Thr Thr Leu Ala Gly Ile Lys Asn Ile Asp Thr Lys Val  
                   145                  150                  155

&lt;210&gt; 489

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (265)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (282)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 489

Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Gly Val Pro Gly Ala Glu  
                   1                  5                  10                  15

Ser Glu Met Ser Ser Ser Gly Thr Pro Asp Leu Pro Val Leu Leu Thr  
                   20                  25                  30

Asp Leu Lys Ile Gln Tyr Thr Lys Ile Phe Ile Asn Asn Glu Trp His  
 35 40 45

Asp Ser Val Ser Gly Lys Lys Phe Pro Val Phe Asn Pro Ala Thr Glu  
 50 55 60

Glu Glu Leu Cys Gln Val Glu Glu Gly Asp Lys Glu Asp Val Asp Lys  
 65 70 75 80

Ala Val Lys Ala Ala Arg Gln Ala Phe Gln Ile Gly Ser Pro Trp Arg  
 85 90 95

Thr Met Asp Ala Ser Glu Arg Gly Arg Leu Leu Tyr Lys Leu Ala Asp  
 100 105 110

Leu Ile Glu Arg Asp Arg Leu Leu Leu Ala Thr Met Glu Ser Met Asn  
 115 120 125

Gly Gly Lys Leu Tyr Ser Asn Ala Tyr Leu Asn Asp Leu Ala Gly Cys  
 130 135 140

Ile Lys Thr Leu Arg Tyr Cys Ala Gly Trp Ala Asp Lys Ile Gln Gly  
 145 150 155 160

Arg Thr Ile Pro Ile Asp Gly Asn Phe Phe Thr Tyr Thr Arg His Glu  
 165 170 175

Pro Ile Gly Val Cys Gly Gln Ile Ile Pro Trp Asn Phe Pro Leu Val  
 180 185 190

Met Leu Ile Trp Lys Ile Gly Pro Ala Leu Ser Cys Gly Asn Thr Val  
 195 200 205

Gly Cys Gln Thr Ser Arg Ala Asn Ser Ser His Cys Ser Pro Arg Gly  
 210 215 220

Ile Phe Asn Lys Arg Gly Arg Val Ser Ser Trp Ser Ser Glu Tyr Cys  
 225 230 235 240

Ser Trp Leu Trp Ala Tyr Ser Arg Gly Ser His Phe Phe Ser His Gly  
 245 250 255

Tyr Arg Gln Ser Ser Leu His Arg Xaa Asn Arg Gly Trp Gln Val Asp  
 260 265 270

Gln Arg Ser Cys Arg Glu Lys Gln Ser Xaa Arg Gly  
 275 280

&lt;210&gt; 490

&lt;211&gt; 329

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (328)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 490

Ala	Gly	Gly	Glu	His	Pro	Glu	Glu	Asp	Pro	Gly	Gly	Gly	Gly	Gln	Asp
1				5					10					15	

Pro	Arg	Gly	Pro	Asp	Pro	Gly	Asp	Glu	Ala	Glu	Ala	Leu	Thr	Gly	Arg
			20					25						30	

Gly	Gly	Ala	Gly	Gly	Gln	Leu	Glu	Gln	Thr	Lys	Arg	Val	Lys	Ala	Asn
		35					40						45		

Leu	Glu	Lys	Ala	Lys	Gln	Thr	Leu	Glu	Asn	Glu	Arg	Gly	Glu	Leu	Ala
	50					55					60				

Asn	Glu	Val	Lys	Val	Leu	Leu	Gln	Gly	Lys	Gly	Asp	Ser	Glu	His	Lys
65					70					75					80

Arg	Lys	Lys	Xaa	Glu	Ala	Gln	Leu	Gln	Glu	Leu	Gln	Val	Lys	Phe	Asn
				85					90					95	

Glu	Gly	Glu	Arg	Val	Arg	Thr	Glu	Leu	Ala	Asp	Lys	Val	Thr	Lys	Leu
			100					105					110		

Gln	Val	Glu	Leu	Asp	Asn	Val	Thr	Gly	Leu	Leu	Ser	Gln	Ser	Asp	Ser
	115						120					125			

Lys	Ser	Ser	Lys	Leu	Thr	Lys	Asp	Phe	Ser	Ala	Leu	Glu	Ser	Gln	Leu
	130					135					140				

Gln	Asp	Thr	Gln	Glu	Leu	Leu	Gln	Glu	Glu	Asn	Arg	Gln	Lys	Leu	Ser
145					150					155					160

Leu	Ser	Thr	Lys	Leu	Lys	Gln	Val	Glu	Asp	Glu	Lys	Asn	Ser	Phe	Arg
			165						170					175	

Glu	Gln	Leu	Glu	Glu	Glu	Glu	Glu	Ala	Lys	His	Asn	Leu	Glu	Lys	Gln
		180						185					190		



Ile Ala Thr Leu His Ala Gln Val Ala Asp Met Lys Lys Lys Met Glu  
 195 200 205  
 Asp Ser Val Gly Cys Leu Glu Thr Ala Glu Glu Val Lys Arg Lys Leu  
 210 215 220  
 Gln Lys Asp Leu Glu Gly Leu Ser Gln Arg His Glu Glu Lys Val Ala  
 225 230 235 240  
 Ala Tyr Asp Lys Leu Glu Lys Thr Lys Thr Arg Leu Gln Gln Glu Leu  
 245 250 255  
 Asp Asp Leu Leu Val Asp Leu Asp His Gln Arg Gln Ser Ala Cys Asn  
 260 265 270  
 Leu Glu Lys Lys Gln Lys Lys Phe Asp Gln Leu Leu Ala Glu Glu Lys  
 275 280 285  
 Thr Ile Ser Ala Lys Tyr Ala Glu Glu Arg Asp Arg Ala Glu Ala Glu  
 290 295 300  
 Ala Arg Glu Lys Glu Thr Lys Ala Leu Ser Leu Ala Arg Ala Leu Glu  
 305 310 315 320  
 Glu Ala Met Glu Gln Lys Ala Xaa Trp  
 325

<210> 491  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<400> 491  
 Gly Arg Ala Ala Ala Pro Gly Leu Ala Thr Arg Thr Gly Glu Cys Asp  
 1 5 10 15  
 Cys Val Ser Gly Ser Met Ala Glu Lys Arg His Thr Arg Asp Ser Glu  
 20 25 30  
 Ala Gln Arg Leu Pro Asp Ser Phe Lys Asp Ser Pro Ser Lys Gly Leu  
 35 40 45  
 Gly Pro Cys Gly Trp Ile Leu Val Ala Phe Ser Phe Leu Phe Thr Val  
 50 55 60  
 Ile Thr Phe Pro Ile Ser Ile Trp Met Cys Ile Lys Ile Ile Lys Glu  
 65 70 75 80

Tyr Glu Arg Ala Ile Ile Phe Arg Leu Gly Arg Ile Leu Gln Gly Gly  
                             85                            90                            95  
 Ala Lys Gly Pro Gly Leu Phe Phe Ile Leu Pro Cys Thr Asp Ser Phe  
                             100                            105                            110  
 Ile Lys Val Asp Met Arg Thr Ile Ser Phe Asp Ile Pro Pro Gln Glu  
                             115                            120                            125  
 Ile Leu Thr Lys Asp Ser Val Thr Ile Ser Val Asp Gly Val Val Tyr  
                             130                            135                            140  
 Tyr Arg Val Gln Asn Ala Thr Leu Ala Val Ala Asn Ile Thr Asn Ala  
                             145                            150                            155                            160  
 Asp Ser Ala Thr Arg Leu Leu Ala Gln Thr Thr Leu Arg Asn Val Leu  
                             165                            170                            175  
 Gly Thr Lys Asn Leu Ser Gln Ile Leu Ser Asp Arg Glu Glu Ile Ala  
                             180                            185                            190  
 His Asn Met Gln Ser Thr Leu Asp Asp Ala Thr Asp Ala Trp Gly Ile  
                             195                            200                            205  
 Lys Val Glu Arg Val Glu Ile Lys Asp Val Lys Leu Pro Val Gln Leu  
                             210                            215                            220  
 Gln Arg Ala Met Ala Ala Glu Ala Glu Ala Ser Arg Glu Ala Arg Ala  
                             225                            230                            235                            240  
 Lys Val Ile Ala Ala Glu Gly Glu Met Asn Ala Ser Arg Ala Leu Lys  
                             245                            250                            255  
 Glu Ala Ser Met Val Ile Thr Glu Ser Pro Ala Ala Leu Gln Leu Arg  
                             260                            265                            270  
 Tyr Leu Gln Thr Leu Thr Thr Ile Ala Ala Glu Lys Asn Ser Thr Ile  
                             275                            280                            285  
 Val Phe Pro Leu Pro Ile Asp Met Leu Gln Gly Ile Ile Gly Ala Lys  
                             290                            295                            300  
 His Ser His Leu Gly  
 305

&lt;210&gt; 492

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 492

Glu Thr Leu Pro Ser Asn Thr Met Ala Ser Asn Val Thr Asn Lys Thr  
 1 5 10 15  
 Asp Pro Arg Ser Met Asn Ser Arg Val Phe Ile Gly Asn Leu Asn Thr  
 20 25 30  
 Leu Val Val Lys Lys Ser Asp Val Glu Ala Ile Phe Ser Lys Tyr Gly  
 35 40 45  
 Lys Ile Val Gly Cys Ser Val His Lys Gly Phe Ala Phe Val Gln Tyr  
 50 55 60  
 Val Asn Glu Arg Asn Ala Arg Ala Ala Val Ala Gly Glu Asp Gly Arg  
 65 70 75 80  
 Met Ile Ala Gly Gln Val Leu Asp Ile Asn Leu Ala Ala Glu Pro Lys  
 85 90 95  
 Val Asn Arg Gly Lys Ala Gly Val Lys Arg Ser Ala Ala Glu Met Tyr  
 100 105 110  
 Gly Ser Ser Phe Asp Leu Asp Tyr Asp Phe Gln Arg Asp Tyr Tyr Asp  
 115 120 125  
 Arg Met Tyr Ser Tyr Pro Ala  
 130 135

&lt;210&gt; 493

&lt;211&gt; 358

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 493

Gly Gly Ser Ala Met Arg Leu Ala Val Leu Phe Ser Gly Ala Leu Leu  
 1 5 10 15  
 Gly Leu Leu Ala Ala Gln Gly Thr Gly Asn Asp Cys Pro His Lys Lys  
 20 25 30  
 Ser Ala Thr Leu Leu Pro Ser Phe Thr Val Xaa Pro Thr Val Thr Glu  
 35 40 45

Ser	Thr	Gly	Thr	Thr	Ser	His	Arg	Thr	Thr	Lys	Ser	His	Lys	Thr	Thr	50	55	60
Thr	His	Arg	Thr	Thr	Thr	Thr	Gly	Thr	Thr	Ser	His	Gly	Pro	Thr	Thr	65	70	75
Ala	Thr	His	Asn	Pro	Thr	Thr	Thr	Ser	His	Gly	Asn	Val	Thr	Val	His	85	90	95
Pro	Thr	Ser	Asn	Ser	Thr	Ala	Thr	Ser	Gln	Gly	Pro	Ser	Thr	Ala	Thr	100	105	110
His	Ser	Pro	Ala	Thr	Thr	Ser	His	Gly	Asn	Ala	Thr	Val	His	Pro	Thr	115	120	125
Ser	Asn	Ser	Thr	Ala	Thr	Ser	Pro	Gly	Phe	Thr	Ser	Ser	Ala	His	Pro	130	135	140
Glu	Pro	Pro	Pro	Pro	Ser	Pro	Ser	Pro	Ser	Pro	Thr	Ser	Lys	Glu	Thr	145	150	155
Ile	Gly	Asp	Tyr	Thr	Trp	Thr	Asn	Gly	Ser	Gln	Pro	Cys	Val	His	Leu	165	170	175
Gln	Ala	Gln	Ile	Gln	Ile	Arg	Val	Met	Tyr	Thr	Thr	Gln	Gly	Gly	Gly	180	185	190
Glu	Ala	Trp	Gly	Ile	Ser	Val	Leu	Asn	Pro	Asn	Lys	Thr	Lys	Val	Gln	195	200	205
Gly	Ser	Cys	Glu	Gly	Ala	His	Pro	His	Leu	Leu	Leu	Ser	Phe	Pro	Tyr	210	215	220
Gly	His	Leu	Ser	Phe	Gly	Phe	Met	Gln	Asp	Leu	Gln	Gln	Lys	Val	Val	225	230	235
Tyr	Leu	Ser	Tyr	Met	Ala	Val	Glu	Tyr	Asn	Val	Ser	Phe	Pro	His	Ala	245	250	255
Ala	Gln	Trp	Thr	Phe	Ser	Ala	Gln	Asn	Ala	Ser	Leu	Arg	Asp	Leu	Gln	260	265	270
Ala	Pro	Leu	Gly	Gln	Ser	Phe	Ser	Cys	Ser	Asn	Ser	Ser	Ile	Ile	Leu	275	280	285
Ser	Pro	Ala	Val	His	Leu	Asp	Leu	Leu	Ser	Leu	Arg	Leu	Gln	Ala	Ala	290	295	300
Gln	Leu	Pro	His	Thr	Gly	Val	Phe	Gly	Gln	Ser	Phe	Ser	Cys	Pro	Ser	305	310	315

Asp Arg Ser Ile Leu Leu Pro Leu Ile Ile Gly Leu Ile Leu Leu Gly  
325 330 335

Leu Leu Ala Leu Val Leu Ile Ala Phe Cys Ile Ile Arg Arg Arg Pro  
340 345 350

Ser Ala Tyr Gln Ala Leu  
355

<210> 494  
<211> 430  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (14)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (15)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (290)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (307)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (412)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 494  
Gly Arg Pro Ser Ser Gly Leu Arg Ser Pro Gly Pro Gly Xaa Xaa Ser  
1 5 10 15

Phe Lys Lys Thr Ser Ser Phe Cys Ala Asp Val Leu Ala Gln Asp Leu  
20 25 30

His Lys Pro Ala Phe Glu Ala Asp Ile Ser Glu Leu Ile Leu Cys Gln  
35 40 45

Asn Glu Val Asp Tyr Ala Leu Lys Asn Leu Gln Ala Trp Met Lys Asp  
 50 55 60

Glu Pro Arg Ser Thr Asn Leu Phe Met Lys Leu Asp Ser Val Phe Ile  
 65 70 75 80

Trp Lys Glu Pro Phe Gly Leu Val Leu Ile Ile Ala Pro Trp Asn Tyr  
 85 90 95

Pro Leu Asn Leu Thr Leu Val Leu Leu Val Gly Ala Leu Ala Ala Gly  
 100 105 110

Asn Cys Val Val Leu Lys Pro Ser Glu Ile Ser Gln Gly Thr Glu Lys  
 115 120 125

Val Leu Ala Glu Val Leu Pro Gln Tyr Leu Asp Gln Ser Cys Phe Ala  
 130 135 140

Val Val Leu Gly Gly Pro Gln Glu Thr Gly Gln Leu Leu Glu His Lys  
 145 150 155 160

Leu Asp Tyr Ile Phe Phe Thr Gly Ser Pro Arg Val Gly Lys Ile Val  
 165 170 175

Met Thr Ala Ala Thr Lys His Leu Thr Pro Val Thr Leu Glu Leu Gly  
 180 185 190

Gly Lys Asn Pro Cys Tyr Val Asp Asp Asn Cys Asp Pro Gln Thr Val  
 195 200 205

Ala Asn Arg Val Ala Trp Phe Cys Tyr Phe Asn Ala Gly Gln Thr Cys  
 210 215 220

Val Ala Pro Asp Tyr Val Leu Cys Ser Pro Glu Met Gln Glu Arg Leu  
 225 230 235 240

Leu Pro Ala Leu Gln Ser Thr Ile Thr Arg Phe Tyr Gly Asp Asp Pro  
 245 250 255

Gln Ser Ser Pro Asn Leu Gly Arg Ile Ile Asn Gln Lys Gln Phe Gln  
 260 265 270

Arg Leu Arg Ala Leu Leu Gly Cys Gly Arg Val Ala Ile Gly Gly Gln  
 275 280 285

Ser Xaa Glu Ser Asp Arg Tyr Ile Ala Pro Thr Val Leu Val Asp Val  
 290 295 300

Gln Glu Xaa Glu Pro Val Met Gln Glu Glu Ile Phe Gly Pro Ile Leu  
 305 310 315 320

Pro	Ile	Val	Asn	Val	Gln	Ser	Leu	Asp	Glu	Ala	Ile	Glu	Phe	Ile	Asn
				325					330					335	
Arg	Arg	Glu	Lys	Pro	Leu	Ala	Leu	Tyr	Ala	Phe	Ser	Asn	Ser	Ser	Gln
			340					345					350		
Val	Val	Lys	Arg	Val	Leu	Thr	Gln	Thr	Ser	Ser	Gly	Gly	Phe	Cys	Gly
		355					360					365			
Asn	Asp	Gly	Phe	Met	His	Met	Thr	Leu	Ala	Ser	Leu	Pro	Phe	Gly	Gly
	370					375					380				
Val	Gly	Ala	Ser	Gly	Met	Gly	Arg	Tyr	His	Gly	Lys	Phe	Ser	Phe	Asp
385					390					395					400
Thr	Phe	Ser	His	His	Arg	Ala	Cys	Leu	Leu	Arg	Xaa	Arg	Gly	Trp	Arg
				405					410					415	
Ser	Ser	Thr	Pro	Ser	Ala	Thr	Arg	Arg	Asn	Arg	Arg	Ala	Ala		
			420					425					430		

<210> 495

<211> 439

<212> PRT

<213> Homo sapiens

$\langle 220 \rangle$

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

 $\langle 220 \rangle$ 

<221> SITE

 $\langle 222 \rangle \quad (416)$ 

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 495

Asp	Ser	Arg	Thr	Arg	Tyr	Ala	Xaa	Glu	Arg	Asp	Lys	Ala	Gln	Phe	Leu
1				5					10					15	
Ser	Lys	Glu	Leu	Glu	His	Val	Lys	Met	Glu	Leu	Ala	Lys	Tyr	Lys	Leu
			20					25					30		
Ala	Glu	Lys	Thr	Glu	Thr	Ser	His	Glu	Gln	Trp	Leu	Phe	Lys	Arg	Leu
		35					40					45			
Gln	Glu	Glu	Glu	Ala	Lys	Ser	Gly	His	Leu	Ser	Arg	Glu	Val	Asp	Ala
50						55					60				

Leu	Lys	Glu	Lys	Ile	His	Glu	Tyr	Met	Ala	Thr	Glu	Asp	Leu	Ile	Cys	65	70	75	80
His	Leu	Gln	Gly	Asp	His	Ser	Val	Leu	Gln	Lys	Lys	Leu	Asn	Gln	Gln	85	90	95	
Glu	Asn	Arg	Asn	Arg	Asp	Leu	Gly	Arg	Glu	Ile	Glu	Asn	Leu	Thr	Lys	100	105	110	
Glu	Leu	Glu	Arg	Tyr	Arg	His	Phe	Ser	Lys	Ser	Leu	Arg	Pro	Ser	Leu	115	120	125	
Asn	Gly	Arg	Arg	Ile	Ser	Asp	Pro	Gln	Val	Phe	Ser	Lys	Glu	Val	Gln	130	135	140	
Thr	Glu	Ala	Val	Asp	Asn	Glu	Pro	Pro	Asp	Tyr	Lys	Ser	Leu	Ile	Pro	145	150	155	160
Leu	Glu	Arg	Ala	Val	Ile	Asn	Gly	Gln	Leu	Tyr	Glu	Glu	Ser	Glu	Asn	165	170	175	
Gln	Asp	Glu	Asp	Pro	Asn	Asp	Glu	Gly	Ser	Val	Leu	Ser	Phe	Lys	Cys	180	185	190	
Ser	Gln	Ser	Thr	Pro	Cys	Pro	Val	Asn	Arg	Lys	Leu	Trp	Ile	Pro	Trp	195	200	205	
Met	Lys	Ser	Lys	Glu	Gly	His	Leu	Gln	Asn	Gly	Lys	Met	Gln	Thr	Lys	210	215	220	
Pro	Asn	Ala	Asn	Phe	Val	Gln	Pro	Gly	Asp	Leu	Val	Leu	Ser	His	Thr	225	230	235	240
Pro	Gly	Gln	Pro	Leu	His	Ile	Lys	Val	Thr	Pro	Asp	His	Val	Gln	Asn	245	250	255	
Thr	Ala	Thr	Leu	Glu	Ile	Thr	Ser	Pro	Thr	Thr	Glu	Ser	Pro	His	Ser	260	265	270	
Tyr	Thr	Ser	Thr	Ala	Val	Ile	Pro	Asn	Cys	Gly	Thr	Pro	Lys	Gln	Arg	275	280	285	
Ile	Thr	Ile	Leu	Gln	Asn	Ala	Ser	Ile	Thr	Pro	Val	Lys	Ser	Lys	Thr	290	295	300	
Ser	Thr	Glu	Asp	Leu	Met	Asn	Leu	Glu	Gln	Gly	Met	Ser	Pro	Ile	Thr	305	310	315	320
Met	Ala	Thr	Phe	Ala	Arg	Ala	Gln	Thr	Pro	Glu	Ser	Cys	Gly	Ser	Leu	325	330	335	



Thr Pro Glu Arg Thr Met Ser Pro Ile Gln Val Leu Ala Val Thr Gly  
 340 345 350  
 Ser Ala Ser Ser Pro Glu Gln Gly Arg Ser Pro Glu Pro Thr Glu Ile  
 355 360 365  
 Ser Ala Lys His Ala Ile Phe Arg Val Ser Pro Asp Arg Gln Ser Ser  
 370 375 380  
 Trp Gln Phe Gln Arg Ser Asn Ser Asn Ser Ser Ser Val Ile Thr Thr  
 385 390 395 400  
 Glu Asp Asn Lys Ile His Ile His Leu Gly Ser Pro Tyr Met Gln Xaa  
 405 410 415  
 Val Ala Ser Pro Val Arg Pro Ala Ser Pro Ser Ala Pro Leu Gln Asp  
 420 425 430  
 Asn Arg Thr Gln Gly Leu Ile  
 435

<210> 496  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 496  
 Glu Ser Thr Gly Thr Ala Ser Arg Ala Ala Thr Met Pro Asn Phe Ser  
 1 5 10 15  
 Gly Asn Trp Lys Ile Ile Arg Ser Glu Asn Phe Glu Glu Leu Leu Lys  
 20 25 30  
 Val Leu Gly Val Asn Val Met Leu Arg Lys Ile Ala Val Ala Ala Ala  
 35 40 45  
 Ser Lys Pro Ala Val Glu Ile Lys Gln Glu Gly Asp Thr Phe Tyr Ile  
 50 55 60  
 Lys Thr Ser Thr Thr Val Arg Thr Thr Glu Ile Asn Phe Lys Val Gly  
 65 70 75 80  
 Glu Glu Phe Glu Glu Gln Thr Val Asp Gly Arg Pro Cys Lys Ser Leu  
 85 90 95  
 Val Lys Trp Glu Ser Glu Asn Lys Met Val Cys Glu Gln Lys Leu Leu  
 100 105 110  
 Lys Gly Glu Gly Pro Lys Thr Ser Trp Thr Arg Glu Leu Thr Asn Asp

115                      120                      125  
 Gly Glu Leu Ile Leu Thr Met Thr Ala Asp Asp Val Val Cys Thr Arg  
 130                      135                      140  
 Val Tyr Val Arg Glu  
 145

<210> 497

<211> 395

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (164)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 497

Ala Glu Lys Lys Ser Thr Lys Thr His Ser Leu Leu Val Gly Arg Glu  
 1                      5                      10                      15  
 Asp Arg Asn Asp Met Ser Thr Ala Gly Lys Val Ile Lys Cys Lys Ala  
 20                      25                      30  
 Ala Val Leu Trp Glu Val Lys Lys Pro Phe Ser Ile Glu Asp Val Glu  
 35                      40                      45  
 Val Ala Pro Pro Lys Ala Tyr Glu Val Arg Ile Lys Met Val Ala Val  
 50                      55                      60  
 Gly Ile Cys Arg Thr Asp Asp His Val Val Ser Gly Asn Leu Val Thr  
 65                      70                      75                      80  
 Pro Leu Pro Val Ile Leu Gly His Glu Ala Ala Gly Ile Val Glu Ser  
 85                      90                      95  
 Val Gly Glu Gly Val Thr Thr Val Lys Pro Gly Asp Lys Val Ile Pro  
 100                      105                      110  
 Leu Phe Thr Pro Gln Cys Gly Lys Cys Arg Val Cys Lys Asn Pro Glu  
 115                      120                      125  
 Ser Asn Tyr Cys Leu Lys Asn Asp Leu Gly Asn Pro Arg Gly Thr Leu  
 130                      135                      140  
 Gln Asp Gly Thr Arg Arg Phe Thr Cys Arg Gly Lys Pro Ile His His  
 145                      150                      155                      160

Phe Leu Gly Xaa Ser Thr Phe Ser Gln Tyr Thr Val Val Asp Glu Asn  
                             165                            170                            175  
 Ala Val Ala Lys Ile Asp Ala Ala Ser Pro Leu Glu Lys Val Cys Leu  
                             180                            185                            190  
 Ile Gly Cys Gly Phe Ser Thr Gly Tyr Gly Ser Ala Val Asn Val Ala  
                             195                            200                            205  
 Lys Val Thr Pro Gly Ser Thr Cys Ala Val Phe Gly Leu Gly Gly Val  
                             210                            215                            220  
 Gly Leu Ser Ala Val Met Gly Cys Lys Ala Ala Gly Ala Ala Arg Ile  
 225                            230                            235                            240  
 Ile Ala Val Asp Ile Asn Lys Asp Lys Phe Ala Lys Ala Lys Glu Leu  
                             245                            250                            255  
 Gly Ala Thr Glu Cys Ile Asn Pro Gln Asp Tyr Lys Lys Pro Ile Gln  
                             260                            265                            270  
 Glu Val Leu Lys Glu Met Thr Asp Gly Gly Val Asp Phe Ser Phe Glu  
                             275                            280                            285  
 Val Ile Gly Arg Leu Asp Thr Met Met Ala Ser Leu Leu Cys Cys His  
                             290                            295                            300  
 Glu Ala Cys Gly Thr Ser Val Ile Val Gly Val Pro Pro Ala Ser Gln  
 305                            310                            315                            320  
 Asn Leu Ser Ile Asn Pro Met Leu Leu Leu Thr Gly Arg Thr Trp Lys  
                             325                            330                            335  
 Gly Ala Val Tyr Gly Gly Phe Lys Ser Lys Glu Gly Ile Pro Lys Leu  
                             340                            345                            350  
 Val Ala Asp Phe Met Ala Lys Lys Phe Ser Leu Asp Ala Leu Ile Thr  
                             355                            360                            365  
 His Val Leu Pro Phe Glu Lys Ile Asn Glu Gly Phe Asp Leu Leu His  
                             370                            375                            380  
 Ser Gly Lys Ser Ile Arg Thr Val Leu Thr Phe  
 385                            390                            395

&lt;210&gt; 498

&lt;211&gt; 281

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 498

Arg	Thr	Leu	Gly	Xaa	Pro	Ser	Ala	Ser	Val	Leu	Pro	His	Ser	Arg	Ala
1				5					10					15	

Leu	Leu	Thr	Pro	Xaa	Arg	Ala	Pro	Lys	Lys	Lys	Met	Ala	Ile	Ser	Gly
			20					25					30		

Val	Pro	Val	Leu	Gly	Phe	Phe	Ile	Ile	Ala	Val	Leu	Met	Ser	Ala	Gln
		35					40					45			

Glu	Ser	Trp	Ala	Ile	Lys	Glu	Glu	His	Val	Ile	Ile	Gln	Ala	Glu	Phe
	50				55						60				

Tyr	Leu	Asn	Pro	Asp	Gln	Ser	Gly	Glu	Phe	Met	Phe	Asp	Phe	Asp	Gly
65					70					75					80

Asp	Glu	Ile	Phe	His	Val	Asp	Met	Ala	Lys	Lys	Glu	Thr	Val	Trp	Arg
				85					90					95	

Leu	Glu	Glu	Phe	Gly	Arg	Phe	Ala	Ser	Phe	Glu	Ala	Gln	Gly	Ala	Leu
			100					105					110		

Ala	Asn	Ile	Ala	Val	Asp	Lys	Ala	Asn	Leu	Glu	Ile	Met	Thr	Lys	Arg
		115					120					125			

Ser	Asn	Tyr	Thr	Pro	Ile	Thr	Asn	Val	Pro	Pro	Glu	Val	Thr	Val	Leu
	130					135					140				

Thr	Asn	Ser	Pro	Val	Glu	Leu	Arg	Glu	Pro	Asn	Val	Leu	Ile	Cys	Phe
145					150					155					160

Ile	Asp	Lys	Phe	Thr	Pro	Pro	Val	Val	Asn	Val	Thr	Trp	Leu	Arg	Asn
				165					170					175	

Gly	Lys	Pro	Val	Thr	Thr	Gly	Val	Ser	Glu	Thr	Val	Phe	Leu	Pro	Arg
			180					185					190		

Glu	Asp	His	Leu	Phe	Arg	Lys	Phe	His	Tyr	Leu	Pro	Phe	Leu	Pro	Ser
		195					200						205		

Thr Glu Asp Val Tyr Asp Cys Arg Val Glu His Trp Gly Leu Asp Glu  
 210 215 220  
 Pro Leu Leu Lys His Trp Glu Phe Asp Ala Pro Ser Pro Leu Pro Glu  
 225 230 235 240  
 Thr Thr Glu Asn Val Val Cys Ala Leu Gly Leu Thr Val Gly Leu Val  
 245 250 255  
 Gly Ile Ile Ile Gly Thr Ile Phe Ile Ile Lys Gly Val Arg Lys Ser  
 260 265 270  
 Asn Ala Ala Glu Arg Arg Gly Pro Leu  
 275 280

<210> 499  
 <211> 446  
 <212> PRT  
 <213> Homo sapiens

<400> 499

Pro Glu Gln Gly Gly Glu Arg Leu Ser Cys Pro Pro Glu Leu Leu Pro  
 1 5 10 15  
 Gly Asp Asn Pro Ser Gln Pro Ile Ala Gln Pro Arg Ser Pro Tyr Ile  
 20 25 30  
 Arg Pro Arg Leu Leu Ala Leu Pro Leu Gly Gln Cys His Leu Gln Asp  
 35 40 45  
 Thr Asp Ser Pro Pro Ser Ala Gln Pro Ser Gln Val Ser Tyr Thr Ala  
 50 55 60  
 Thr Met Pro Phe Gly Asn Thr His Asn Lys Phe Lys Leu Asn Tyr Lys  
 65 70 75 80  
 Pro Glu Glu Glu Tyr Pro Asp Leu Ser Lys His Asn Asn His Met Ala  
 85 90 95  
 Lys Val Leu Thr Leu Glu Leu Tyr Lys Lys Leu Arg Asp Lys Glu Thr  
 100 105 110  
 Pro Ser Gly Phe Thr Val Asp Asp Val Ile Gln Thr Gly Val Asp Asn  
 115 120 125  
 Pro Gly His Pro Phe Ile Met Thr Val Gly Cys Val Ala Gly Asp Glu  
 130 135 140  
 Glu Ser Tyr Glu Val Phe Lys Glu Leu Phe Asp Pro Ile Ile Ser Asp

145		150		155		160
Arg His Gly Gly Tyr Lys Pro Thr Asp Lys His Lys Thr Asp Leu Asn						
	165		170		175	
His Glu Asn Leu Lys Gly Gly Asp Asp Leu Asp Pro Asn Tyr Val Leu						
	180		185		190	
Ser Ser Arg Val Arg Thr Gly Arg Ser Ile Lys Gly Tyr Thr Leu Pro						
	195		200		205	
Pro His Cys Ser Arg Gly Glu Arg Arg Ala Val Glu Lys Leu Ser Val						
	210		215		220	
Glu Ala Leu Asn Ser Leu Thr Gly Glu Phe Lys Gly Lys Tyr Tyr Pro						
225		230		235		240
Leu Lys Ser Met Thr Glu Lys Glu Gln Gln Gln Leu Ile Asp Asp His						
	245		250		255	
Phe Leu Phe Asp Lys Pro Val Ser Pro Leu Leu Leu Ala Ser Gly Met						
	260		265		270	
Ala Arg Asp Trp Pro Asp Ala Arg Gly Ile Trp His Asn Asp Asn Lys						
	275		280		285	
Ser Phe Leu Val Trp Val Asn Glu Glu Asp His Leu Arg Val Ile Ser						
	290		295		300	
Met Glu Lys Gly Gly Asn Met Lys Glu Val Phe Arg Arg Phe Cys Val						
305		310		315		320
Gly Leu Gln Lys Ile Glu Glu Ile Phe Lys Lys Ala Gly His Pro Phe						
	325		330		335	
Met Trp Asn Gln His Leu Gly Tyr Val Leu Thr Cys Pro Ser Asn Leu						
	340		345		350	
Gly Thr Gly Leu Arg Gly Gly Val His Val Lys Leu Ala His Leu Ser						
	355		360		365	
Lys His Pro Lys Phe Glu Glu Ile Leu Thr Arg Leu Arg Leu Gln Lys						
	370		375		380	
Arg Gly Thr Gly Gly Val Asp Thr Ala Ala Val Gly Ser Val Phe Asp						
385		390		395		400
Val Ser Asn Ala Asp Arg Leu Gly Ser Ser Glu Val Glu Gln Val Gln						
	405		410		415	
Leu Val Val Asp Gly Val Lys Leu Met Val Glu Met Glu Lys Lys Leu						

501

420                      425                      430  
 Glu Lys Gly Gln Ser Ile Asp Asp Met Ile Pro Ala Gln Lys  
           435                      440                      445

<210> 500  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (8)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (179)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (196)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 500  
 Leu Cys Pro Arg His Ala Xaa Xaa Ala His Leu His Val Glu Ile Phe  
   1                          5                          10                          15  
 Gly Thr Gln Gly Lys Pro Ala Ile Ala His Arg Asp Phe Lys Ser Arg  
           20                          25                          30  
 Asn Val Leu Val Lys Ser Asn Leu Gln Cys Cys Ile Ala Asp Leu Gly  
           35                          40                          45  
 Leu Ala Val Met His Ser Gln Gly Ser Asp Tyr Leu Asp Ile Gly Asn  
           50                          55                          60  
 Asn Pro Arg Val Gly Thr Lys Arg Tyr Met Ala Pro Glu Val Leu Asp

502

65		70		75		80									
Glu	Gln	Ile	Arg	Thr	Asp	Cys	Phe	Glu	Ser	Tyr	Lys	Trp	Thr	Asp	Ile
				85					90					95	
Trp	Ala	Phe	Gly	Leu	Val	Leu	Trp	Glu	Ile	Ala	Arg	Arg	Thr	Ile	Val
			100					105					110		
Asn	Gly	Ile	Val	Glu	Asp	Tyr	Arg	Pro	Pro	Phe	Tyr	Xaa	Val	Val	Pro
		115					120					125			
Asn	Asp	Pro	Ser	Phe	Glu	Asp	Met	Lys	Lys	Val	Val	Cys	Val	Asp	Gln
		130					135					140			
Gln	Thr	Pro	Thr	Ile	Pro	Asn	Arg	Leu	Ala	Ala	Asp	Pro	Val	Leu	Ser
145					150					155					160
Gly	Leu	Ala	Gln	Met	Met	Arg	Glu	Cys	Trp	Tyr	Pro	Asn	Pro	Ser	Ala
				165					170					175	
Arg	Leu	Xaa	Ala	Leu	Gly	Ser	Arg	Arg	His	Tyr	Lys	Lys	Leu	Ala	Thr
			180					185					190		
Val	Gln	Arg	Xaa	Leu	Lys										
			195												

&lt;210&gt; 501

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (119)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (137)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (141)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 501

His	Glu	Gly	Gly	Gly	His	Gly	His	Ala	Gly	His	His	His	His	His	His
1					5				10					15	



His	His	His	His	His	Pro	Pro	Met	Ile	Ala	Leu	Gln	Pro	Leu	Val	Thr	20	25	30	
Asp	Asp	Pro	Thr	Gln	Val	His	His	His	Gln	Glu	Val	Ile	Leu	Val	Gln	35	40	45	
Thr	Arg	Glu	Glu	Val	Val	Gly	Gly	Asp	Asp	Ser	Asp	Gly	Leu	Arg	Ala	50	55	60	
Glu	Asp	Gly	Phe	Glu	Asp	Gln	Ile	Leu	Ile	Pro	Val	Pro	Ala	Pro	Ala	65	70	75	80
Gly	Gly	Asp	Asp	Asp	Tyr	Ile	Glu	Gln	Thr	Leu	Val	Thr	Val	Ala	Ala	85	90	95	
Ala	Gly	Lys	Ser	Gly	Gly	Gly	Gly	Ser	Phe	Val	Val	Gly	Arg	Arg	Pro	100	105	110	
Arg	Gln	Glu	Gly	Arg	Arg	Xaa	Glu	Glu	Arg	Gln	Glu	Glu	Leu	Pro	Gln	115	120	125	
Arg	Arg	Gly	Ala	Arg	Arg	Ala	Ala	Xaa	Arg	Thr	Arg	Xaa	Asn	Lys	Lys	130	135	140	
Trp	Glu	Gln	Lys	Gln	Val	Gln	Ile	Lys	Thr	Leu	Glu	Gly	Glu	Phe	Ser	145	150	155	160
Val	Thr	Met	Trp	Ser	Ser	Asp	Glu	Lys	Lys	Asp	Ile	Asp	His	Glu	Thr	165	170	175	
Val	Val	Glu	Glu	Gln	Ile	Ile	Gly	Glu	Asn	Ser	Pro	Pro	Asp	Tyr	Ser	180	185	190	
Glu	Tyr	Met	Thr	Gly	Lys	Lys	Leu	Pro	Pro	Gly	Gly	Ile	Pro	Gly	Ile	195	200	205	
Asp	Leu	Ser	Asp	Pro	Lys	Gln	Leu	Ala	Glu	Phe	Ala	Arg	Met	Lys	Pro	210	215	220	
Arg	Lys	Ile	Lys	Glu	Asp	Asp	Ala	Pro	Arg	Thr	Ile	Ala	Cys	Pro	His	225	230	235	240
Lys	Gly	Cys	Thr	Lys	Met	Phe	Arg	Asp	Asn	Ser	Ala	Met	Arg	Lys	His	245	250	255	
Leu	His	Thr	His	Gly	Pro	Arg	Val	His	Val	Cys	Ala	Glu	Cys	Gly	Lys	260	265	270	
Ala	Phe	Val	Glu	Ser	Ser	Lys	Leu	Lys	Arg	His	Gln	Leu	Val	His	Thr	275	280	285	

504

Gly Glu Lys Pro Phe Gln Cys Thr Phe Glu Gly Cys Gly Lys Arg Phe  
 290 295 300

Ser Leu Asp Phe Asn Leu Arg Thr His Val Arg Ile His Thr Gly Asp  
 305 310 315 320

Arg Pro Tyr Val Cys Pro Phe Asp Gly Cys Asn Lys Lys Phe Ala Gln  
 325 330 335

Ser Thr Asn Leu Lys Ser His Ile Leu Thr His Ala Lys Ala Lys Asn  
 340 345 350

Asn Gln

<210> 502

<211> 81

<212> PRT

<213> Homo sapiens

<400> 502

Leu Pro Trp Leu Leu Phe Glu Thr Val Met Thr Phe Leu Leu Ile Ser  
 1 5 10 15

Leu Leu Val Ser Phe Ser Gly Arg Ala Gly Cys Leu Glu Phe Ser Val  
 20 25 30

Lys Glu Thr Gln Asp Ser Pro Leu Phe Leu Cys Leu Trp Glu Ser Pro  
 35 40 45

Trp His Thr Pro Lys Arg Gly Pro Cys Ser Val Ser Gln Gly Ser Phe  
 50 55 60

Cys Ile Phe Gly Leu Ala Ser Tyr Ile Cys His Val Val Ser Ser Ser  
 65 70 75 80

Ala

<210> 503

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

505

<222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (41)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (49)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (51)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (56)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 503  
 Thr Pro Ala Pro Xaa Ser Pro Ala Ala Ala Arg Glu Ser Thr Arg Arg  
     1                    5                    10                    15  
  
 Val Ala Ile Asn Val Arg Ala Ser Ile Ala Leu Ser Xaa Ser Leu Arg  
             20                    25                    30  
  
 Thr Leu Val Leu Pro Arg Leu Thr Xaa Thr Ser Pro Gly Pro Arg Gly  
             35                    40                    45  
  
 Xaa Gly Xaa Phe Gly Cys Pro Xaa Ser Phe Lys  
     50                    55  
  
  
 <210> 504  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 504  
 Ser Leu Phe Thr Met Ser Leu Gln Arg Leu Leu Gln His Ser Ser Asn  
     1                    5                    10                    15

506

Gly Asn Leu Ala Asp Phe Cys Ala Gly Pro Ala Tyr Ser Ser Tyr Ser  
                   20                                  25                                  30  
 Thr Leu Thr Gly Ser Leu Thr Met Asp Asp Asn Arg Arg Ile Gln Met  
                   35                                  40                                  45  
 Leu Ala Asp Thr Val Ala Thr Leu Pro Arg Gly Arg Lys Gln Leu Ala  
                   50                                  55                                  60  
 Leu Thr Arg Ser Ser Ser Leu Ser Asp Phe Ser Trp Ser Gln Arg Lys  
                   65                                  70                                  75                                  80  
 Leu Val Thr Val Glu Lys Gln Asp Asn Glu Thr Phe Gly Phe Glu Ile  
                                   85                                  90                                  95  
 Gln Ser Tyr Arg Pro Gln Asn Gln Asn Ala Cys Ser Ser Glu Met Phe  
                   100                                  105                                  110  
 Thr Leu Ile Cys Lys Ile Gln Glu Asp Ser Pro Ala His Cys Ala Gly  
                   115                                  120                                  125  
 Leu Gln Ala Gly Asp Val Leu Ala Asn Ile Asn Gly Val Ser Thr Glu  
                   130                                  135                                  140  
 Gly Phe Thr Tyr Lys Gln Val Val Asp Leu Ile Arg Ser Ser Gly Asn  
                   145                                  150                                  155                                  160  
 Leu Leu Thr Ile Glu Thr Leu Asn Gly Thr Met Ile Leu Lys Arg Thr  
                   165                                  170                                  175  
 Glu Leu Glu Ala Lys Leu Gln Val Leu Lys Gln Thr Leu Lys Gln Asn  
                   180                                  185                                  190  
 Gly Trp Ser Thr Asp Leu Cys Ser Tyr Arg Asn Ile Val Cys Phe Met  
                   195                                  200                                  205  
 Val Met Gln Leu Ile Ala Pro Val Trp Glu Asn Met Gly Leu Gly Met  
                   210                                  215                                  220  
 Glu Leu Ser Leu Phe Gly Pro Leu Pro Gly Pro Gly Pro Ala Leu Val  
                   225                                  230                                  235                                  240  
 Asp Arg Asn Arg Leu Ser Ser Glu Ser Ser Cys  
                   245                                  250

&lt;210&gt; 505

&lt;211&gt; 112

&lt;212&gt; PRT

507

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 505

Ile	Arg	Gln	Ser	Gly	Thr	Ser	Gly	Thr	Arg	Pro	Arg	Gly	Pro	Gln	Glu
1				5					10					15	

Pro	Arg	Ala	Ala	Xaa	Arg	Gly	Ser	Phe	Leu	Ala	Ser	Ala	Arg	Arg	Val
		20				25						30			

Gly	Ser	Trp	Leu	Val	Ser	Ala	Glu	Gly	Val	Gly	Gly	Pro	Ala	Leu	Leu
	35						40					45			

Phe	Ser	Pro	Ala	Lys	Pro	Gln	Trp	Glu	Leu	Gly	Gln	Gly	Glu	Ser	Gln
	50					55					60				

Ala	Ile	Gly	Gly	Gln	Xaa	Trp	Gly	Cys	Ser	Pro	Thr	Val	Cys	Ile	Cys
65					70					75				80	

Ser	Ala	Leu	Trp	Gly	Ile	Gln	Glu	His	Pro	Pro	Ser	Arg	Gly	Trp	Glu
				85					90					95	

Pro	Cys	Pro	Met	Lys	Pro	Ser	Pro	Gln	Leu	Tyr	Leu	Leu	Pro	Arg	Pro
			100					105					110		

&lt;210&gt; 506

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 506

Lys Asn His Val Ser Ser Leu Ser Ser Tyr Phe Phe Phe Ser Xaa Phe

508

```

      1             5             10             15
Ser Leu Pro Arg Thr Phe Ser Leu Phe Ser Thr Asn Val His Leu Val
      20             25             30
Phe Phe Gly Ser Ala Lys Ile Ser Ile Cys Val Cys Leu Gln Leu Ser
      35             40             45
Leu Leu Thr Ala His Ser Lys Gly Phe Cys Ile Ser Gly Phe His Phe
      50             55             60
Val Ala Ala Glu Met Leu Arg Gln Ala Ser Ala Ser Ala Pro Ala Gly
      65             70             75             80
Cys Thr Met Leu Leu Pro Arg Arg Glu Asp Thr Glu Ser Lys Trp Gln
      85             90             95
Asp Leu Arg Leu Ala Ser Thr Leu Pro
      100             105

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&lt;210&gt; 507

&lt;211&gt; 406

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (71)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 507

```

Val Lys Gly Asp Lys Gly Asn Pro Gly Trp Pro Gly Ala Pro Gly Val
  1             5             10             15
Pro Gly Pro Lys Gly Asp Pro Gly Phe Gln Gly Met Pro Gly Ile Gly
      20             25             30
Gly Ser Pro Gly Ile Thr Gly Ser Lys Gly Asp Met Gly Pro Pro Gly
      35             40             45
Val Pro Gly Phe Gln Gly Pro Lys Gly Leu Pro Gly Leu Gln Gly Ile
      50             55             60
Lys Gly Asp Gln Gly Asp Xaa Gly Val Pro Gly Ala Lys Gly Leu Pro
      65             70             75             80
Gly Pro Pro Gly Pro Pro Gly Pro Tyr Asp Ile Ile Lys Gly Glu Pro
      85             90             95

```

Gly Leu Pro Gly Pro Glu Gly Pro Pro Gly Leu Lys Gly Leu Gln Gly  
 100 105 110  
 Leu Pro Gly Pro Lys Gly Gln Gln Gly Val Thr Gly Leu Val Gly Ile  
 115 120 125  
 Pro Gly Pro Pro Gly Ile Pro Gly Phe Asp Gly Ala Pro Gly Gln Lys  
 130 135 140  
 Gly Glu Met Gly Pro Ala Gly Pro Thr Gly Pro Arg Gly Phe Pro Gly  
 145 150 155 160  
 Pro Pro Gly Pro Asp Gly Leu Pro Gly Ser Met Gly Pro Pro Gly Thr  
 165 170 175  
 Pro Ser Val Asp His Gly Phe Leu Val Thr Arg His Ser Gln Thr Ile  
 180 185 190  
 Asp Asp Pro Gln Cys Pro Ser Gly Thr Lys Ile Leu Tyr His Gly Tyr  
 195 200 205  
 Ser Leu Leu Tyr Val Gln Gly Asn Glu Arg Ala His Gly Gln Asp Leu  
 210 215 220  
 Gly Thr Ala Gly Ser Cys Leu Arg Lys Phe Ser Thr Met Pro Phe Leu  
 225 230 235 240  
 Phe Cys Asn Ile Asn Asn Val Cys Asn Phe Ala Ser Arg Asn Asp Tyr  
 245 250 255  
 Ser Tyr Trp Leu Ser Thr Pro Glu Pro Met Pro Met Ser Met Ala Pro  
 260 265 270  
 Ile Thr Gly Glu Asn Ile Arg Pro Phe Ile Ser Arg Cys Ala Val Cys  
 275 280 285  
 Glu Ala Pro Ala Met Val Met Ala Val His Ser Gln Thr Ile Gln Ile  
 290 295 300  
 Pro Pro Cys Pro Ser Gly Trp Ser Ser Leu Trp Ile Gly Tyr Ser Phe  
 305 310 315 320  
 Val Met His Thr Ser Ala Gly Ala Glu Gly Ser Gly Gln Ala Leu Ala  
 325 330 335  
 Ser Pro Gly Ser Cys Leu Glu Glu Phe Arg Ser Ala Pro Phe Ile Glu  
 340 345 350  
 Cys His Gly Arg Gly Thr Cys Asn Tyr Tyr Ala Asn Ala Tyr Ser Phe  
 355 360 365

510

Trp Leu Ala Thr Ile Glu Arg Ser Glu Met Phe Lys Lys Pro Thr Pro  
 370 375 380

Ser Thr Leu Lys Ala Gly Glu Leu Arg Thr His Val Ser Arg Cys Gln  
 385 390 395 400

Val Cys Met Arg Arg Thr  
 405

<210> 508

<211> 91

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 508

Leu Pro Ser Pro Asn Thr Gly Leu Trp Pro Gln Arg Xaa Ser Phe Ser  
 1 5 10 15

Gly Arg Lys Phe Val Pro Thr Asp Cys Pro Pro Ala Phe Phe Pro Leu  
 20 25 30

Ala Ala Ile Cys Cys Arg Leu Glu Pro Glu Ser Arg Pro Ala Phe Ser  
 35 40 45

Lys Leu Glu Asp Ser Phe Glu Ala Leu Ser Leu Tyr Leu Gly Glu Leu  
 50 55 60

Gly Ile Pro Leu Pro Ala Glu Leu Glu Glu Leu Asp His Thr Val Ser  
 65 70 75 80

Met Gln Tyr Gly Leu Thr Arg Asp Ser Pro Pro  
 85 90

<210> 509

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids



511

&lt;400&gt; 509

Thr Cys Ile His Ile Gly Phe Gln Asp Ile Leu Ser Tyr Ile Phe Ser  
 1 5 10 15

Ser Phe Gln Ser Cys Phe Leu Phe Trp Gly Tyr Phe Phe Phe Xaa Leu  
 20 25 30

Cys Asn Ser Gln Arg Ala Ala Phe Phe Phe Phe Asn Lys Ala Tyr  
 35 40 45

Asn Tyr Gly Trp Ile Phe Cys Ser Ser Leu Leu Arg Arg Ala Ile Leu  
 50 55 60

Phe Phe Arg Val Thr Ser Lys Val Met Trp  
 65 70

&lt;210&gt; 510

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 510

Leu Val Phe Phe Thr Asp Ser Leu Phe Ser Arg Arg Ala Phe Tyr Leu  
 1 5 10 15

Asn Lys Thr Met Gln Leu Ser Lys Pro Ile Tyr Gly Leu Arg Glu Thr  
 20 25 30

Phe Leu His Glu Phe Leu Gln Thr Val Cys Tyr Ile Phe Leu Glu  
 35 40 45

&lt;210&gt; 511

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (207)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 511

Gly Ala Arg Ser Pro Ala Met Ser Arg Ser Asn Arg Gln Lys Glu Tyr  
 1 5 10 15

Lys Cys Gly Asp Leu Val Phe Ala Lys Met Lys Gly Tyr Pro His Trp

512

20	25	30
Pro Ala Arg Ile Asp Glu Met	Pro Glu Ala Ala Val Lys Ser Thr Ala	
35	40	45
Asn Lys Tyr Gln Val Phe Phe Phe Gly Thr His Glu Thr Ala Phe Leu		
50	55	60
Gly Pro Lys Asp Leu Phe Pro Tyr Glu Glu Ser Lys Glu Lys Phe Gly		
65	70	75
Lys Pro Asn Lys Arg Lys Gly Phe Ser Glu Gly Leu Trp Glu Ile Glu		
85	90	95
Asn Asn Pro Thr Val Lys Ala Ser Gly Tyr Gln Ser Ser Gln Lys Lys		
100	105	110
Ser Cys Val Glu Glu Pro Glu Pro Glu Pro Glu Ala Ala Glu Gly Asp		
115	120	125
Gly Asp Lys Lys Gly Asn Ala Glu Gly Ser Ser Asp Glu Glu Gly Lys		
130	135	140
Leu Val Ile Asp Glu Pro Ala Lys Glu Lys Asn Glu Lys Gly Ala Leu		
145	150	155
Lys Arg Arg Ala Gly Asp Leu Leu Glu Asp Ser Pro Lys Arg Pro Lys		
165	170	175
Glu Ala Glu Asn Pro Glu Gly Glu Glu Lys Glu Ala Ala Thr Leu Glu		
180	185	190
Val Glu Arg Pro Leu Pro Met Glu Val Glu Lys Asn Ser Thr Xaa Ser		
195	200	205
Glu Pro Gly Ser Gly Arg Gly Pro Pro Gln Glu Glu Glu Glu Glu Glu		
210	215	220
Asp Glu Glu Glu Glu Ala Thr Lys Glu Asp Ala Glu Ala Pro Gly Ile		
225	230	235
Arg Asp His Glu Ser Leu		
245		

&lt;210&gt; 512

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 512

Leu	Xaa	Trp	Glu	Thr	Val	Gln	Lys	Asn	Gln	Asn	Leu	Arg	Cys	Phe	Val
1				5					10					15	
Phe	Ile	Phe	Ile	Ser	Ser	Trp	Thr	Asp	Leu	Gly	Val	Ala	Thr	Val	Val
			20					25					30		
Cys	Gln	Pro	Asn	Glu	Phe	Ile	Met	Pro	Asp	Ser	Ala	Val	Val	Gly	Asp
		35					40					45			
Val	Leu	Val	Leu	Thr	Lys	Pro	Leu	Gly	Thr	Gln	Val	Ala	Val	Asn	Ala
	50					55					60				
His	Gln	Trp	Leu	Asp	Asn	Pro	Glu	Arg	Trp	Asn	Lys	Val	Lys	Met	Val
65					70					75					80
Val	Ser	Arg	Glu	Glu	Val	Glu	Leu	Ala	Tyr	Gln	Glu	Ala	Met	Phe	Asn
				85					90					95	
Met	Ala	Thr	Leu	Asn	Arg	Thr	Ala	Ala	Gly	Leu	Met	His	Thr	Phe	Asn
			100					105					110		
Ala	His	Ala	Ala	Thr	Asp	Ile	Thr	Gly	Phe	Gly	Ile	Leu	Gly	His	Ser
		115					120					125			
Gln	Asn	Leu	Ala	Lys	Gln	Gln	Arg	Asn	Glu	Val	Ser	Phe	Val	Ile	His
	130					135					140				
Asn	Leu	Pro	Ile	Ile	Ala	Lys	Met	Ala	Ala	Val	Ser	Lys	Ala	Ser	Gly
145					150					155					160
Arg	Phe	Gly	Leu	Leu	Gln	Gly	Thr	Ser	Ala	Glu	Thr	Ser	Gly	Gly	Leu
			165						170					175	
Leu	Ile	Cys	Leu	Pro	Arg	Glu	Gln	Ala	Ala	Arg	Phe	Cys	Ser	Glu	Ile
			180					185					190		
Lys	Ser	Ser	Lys	Tyr	Gly	Glu	Gly	His	Gln	Ala	Trp	Ile	Val	Gly	Ile
		195					200					205			
Val	Glu	Lys	Gly	Asn	Arg	Thr	Ala	Arg	Ile	Ile	Asp	Lys	Pro	Arg	Val
	210					215					220				
Ile	Glu	Val	Leu	Pro	Arg	Gly	Ala	Thr	Ala	Ala	Val	Leu	Ala	Pro	Asp
225					230					235					240

514

Ser Ser Asn Ala Ser Ser Glu Pro Ser Ser  
                   245                  250

<210> 513  
 <211> 418  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (56)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (213)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (275)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (320)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 513  
 Pro Phe Glu Asp Ser Gly Gln Arg Arg His His Glu Gly Ala Gly Ser  
   1                  5                  10                  15

Ala Gly Pro Leu Leu Gln Ser Thr Ile Ile Val Glu Lys Thr Val Gln  
                   20                  25                  30

Asp Leu Leu Asn Leu Met His Asp Leu Ser Ala Tyr Ser Asp Gln Phe  
                   35                  40                  45

Leu Asn Met Val Cys Val Lys Xaa Gln Glu Tyr Lys Asp Thr Cys Thr  
                   50                  55                  60

Ala Ala Tyr Arg Gly Ile Val Gln Ser Glu Glu Lys Leu Val Ile Ser  
                   65                  70                  75                  80

Ala Ser Trp Ala Lys Asp Asp Asp Ile Ser Arg Leu Leu Lys Ser Leu  
                   85                  90                  95

Pro Asn Trp Met Asn Met Ala Gln Pro Lys Gln Leu Arg Pro Lys Arg  
                   100                  105                  110

515

Glu	Glu	Glu	Glu	Asp	Phe	Ile	Arg	Ala	Ala	Phe	Gly	Lys	Glu	Ser	Glu	115	120	125
Val	Leu	Ile	Gly	Asn	Leu	Gly	Asp	Lys	Leu	Ile	Pro	Pro	Gln	Asp	Ile	130	135	140
Leu	Arg	Asp	Val	Ser	Asp	Leu	Lys	Ala	Leu	Ala	Asn	Met	His	Glu	Ser	145	150	155
Leu	Glu	Trp	Leu	Ala	Ser	Arg	Thr	Lys	Ser	Ala	Phe	Ser	Asn	Leu	Ser	165	170	175
Thr	Ser	Gln	Met	Leu	Ser	Pro	Ala	Gln	Asp	Ser	His	Thr	Asn	Thr	Asp	180	185	190
Leu	Pro	Pro	Val	Ser	Glu	Gln	Ile	Met	Gln	Thr	Leu	Ser	Glu	Leu	Ala	195	200	205
Lys	Ser	Phe	Gln	Xaa	Met	Ala	Asp	Arg	Cys	Leu	Leu	Val	Leu	His	Leu	210	215	220
Glu	Val	Arg	Val	His	Cys	Phe	His	Tyr	Leu	Ile	Pro	Leu	Ala	Lys	Glu	225	230	235
Gly	Asn	Tyr	Ala	Ile	Val	Ala	Asn	Val	Glu	Ser	Met	Asp	Tyr	Asp	Pro	245	250	255
Leu	Val	Val	Lys	Leu	Asn	Lys	Asp	Ile	Ser	Ala	Ile	Glu	Glu	Ala	Met	260	265	270
Ser	Ala	Xaa	Phe	Gln	Gln	His	Lys	Phe	Gln	Tyr	Ile	Phe	Glu	Gly	Leu	275	280	285
Gly	His	Leu	Ile	Ser	Cys	Ile	Leu	Ile	Asn	Gly	Ala	Gln	Tyr	Phe	Arg	290	295	300
Arg	Ile	Ser	Glu	Ser	Gly	Ile	Lys	Lys	Met	Cys	Arg	Asn	Ile	Phe	Xaa	305	310	315
Leu	Gln	Gln	Asn	Leu	Thr	Asn	Ile	Thr	Met	Ser	Arg	Glu	Ala	Asp	Leu	325	330	335
Asp	Phe	Ala	Arg	Gln	Tyr	Tyr	Glu	Met	Leu	Tyr	Asn	Thr	Ala	Asp	Glu	340	345	350
Leu	Leu	Asn	Leu	Val	Val	Asp	Gln	Gly	Val	Lys	Tyr	Thr	Glu	Leu	Glu	355	360	365
Tyr	Ile	His	Ala	Leu	Thr	Leu	Leu	His	Arg	Ser	Gln	Thr	Gly	Val	Gly	370	375	380

516

Glu Leu Thr Thr Gln Asn Thr Arg Leu Gln Arg Leu Lys Glu Ile Ile  
385 390 395 400

Cys Glu Gln Ala Ala Ile Lys Gln Ala Thr Lys Asp Lys Lys Ile Thr  
405 410 415

Thr Val

<210> 514

<211> 61

<212> PRT

<213> Homo sapiens

<400> 514

Lys Ala Ser Asp Cys Ser Met Leu Thr Pro Thr Ser Arg Tyr Glu Gln  
1 5 10 15

Phe Thr Glu Asn Leu Pro Leu Trp Gln Leu Lys Met Glu Val Trp Gly  
20 25 30

Ala Gln Thr Thr Leu Ser Asn Asn Ile Lys Ala Asn Ile Asn Ser His  
35 40 45

Lys His Tyr Arg Ile Cys Lys Phe Arg Thr Phe Tyr Thr  
50 55 60

<210> 515

<211> 181

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 515

Arg	Ser	Trp	Gly	Gly	Leu	Xaa	Arg	Ser	Thr	Gly	Thr	Ala	Arg	Arg	Thr
1				5					10					15	

Ser	Trp	Arg	Arg	Ser	Gly	Gln	Cys	Arg	Thr	Gly	Cys	Ala	Asp	Thr	Thr
			20					25					30		

Thr	Ser	Trp	Xaa	Xaa	Pro	Xaa	Thr	Leu	Gln	Arg	Arg	Val	Gln	Pro	Xaa
			35				40					45			

Val	Asn	Val	Ser	Pro	Ser	Lys	Lys	Gly	Pro	Leu	Gln	His	His	Asn	Leu
	50					55					60				

Leu	Val	Cys	His	Val	Thr	Asp	Phe	Tyr	Pro	Gly	Ser	Ile	Gln	Val	Arg
65					70					75					80

Trp	Phe	Leu	Asn	Gly	Gln	Glu	Glu	Thr	Ala	Gly	Val	Val	Ser	Thr	Asn
				85					90					95	

Leu	Ile	Arg	Asn	Gly	Asp	Trp	Thr	Phe	Gln	Ile	Leu	Val	Met	Leu	Glu
			100					105					110		

Met	Thr	Pro	Gln	Gln	Gly	Asp	Val	Tyr	Xaa	Cys	Gln	Val	Glu	His	Thr
		115					120					125			

Ser	Leu	Asp	Ser	Pro	Val	Thr	Val	Glu	Trp	Lys	Ala	Gln	Ser	Asp	Ser
	130					135					140				

Ala	Arg	Ser	Lys	Thr	Leu	Thr	Gly	Ala	Gly	Gly	Phe	Val	Leu	Gly	Leu
145					150					155					160

Ile	Ile	Cys	Gly	Val	Gly	Ile	Phe	Met	His	Arg	Arg	Ser	Lys	Lys	Val
			165						170					175	

Gln	Arg	Gly	Ser	Ala
-----	-----	-----	-----	-----

180

<210> 516

<211> 255

<212> PRT

<213> Homo sapiens

<400> 516

Ala Leu Glu Arg Arg Val Arg Lys Ser Gly Asp Cys Cys Thr Asp Ser  
1 5 10 15

Gly Thr Met Asn Ile Phe Asp Arg Lys Ile Asn Phe Asp Ala Leu Leu  
20 25 30

Lys Phe Ser His Ile Thr Pro Ser Thr Gln Gln His Leu Lys Lys Val  
35 40 45

Tyr Ala Ser Phe Ala Leu Cys Met Phe Val Ala Ala Ala Gly Ala Tyr  
50 55 60

Val His Met Val Thr His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu  
65 70 75 80

Gly Ser Leu Ile Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His  
85 90 95

Glu Thr Glu Gln Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu  
100 105 110

Thr Gly Val Gly Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn  
115 120 125

Pro Ser Ile Leu Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr  
130 135 140

Cys Phe Thr Leu Ser Ala Leu Tyr Ala Arg Arg Arg Ser Tyr Leu Phe  
145 150 155 160

Leu Gly Gly Ile Leu Met Ser Ala Leu Ser Leu Leu Leu Leu Ser Ser  
165 170 175

Leu Gly Asn Val Phe Phe Gly Ser Ile Trp Leu Phe Gln Ala Asn Leu  
180 185 190

Tyr Val Gly Leu Val Val Met Cys Gly Phe Val Leu Phe Asp Thr Gln  
195 200 205

Leu Ile Ile Glu Lys Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His  
210 215 220



519

Cys Ile Asp Leu Phe Leu Asp Phe Ile Thr Val Phe Arg Lys Leu Met  
 225 230 235 240

Met Ile Leu Ala Met Asn Glu Lys Asp Lys Lys Lys Glu Lys Lys  
 245 250 255

<210> 517

<211> 247

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 517

Xaa Val Gly Arg Gly Xaa Arg Cys Ser Ser Ala Ser Pro Gly Thr Pro  
 1 5 10 15

Pro Pro Arg Ala Pro Ala Xaa Pro Ser Ala Gly Arg Ala Asp Pro Ala  
 20 25 30

Val Leu Ser Pro Ala Ala Arg Ala Gly Ala Ala Pro Ser Ala Pro Gln  
 35 40 45

Gln Thr Pro Ile Met Gly Ser Gln Ser Ser Lys Ala Pro Arg Gly Asp  
 50 55 60

Val Thr Ala Glu Glu Ala Ala Gly Ala Ser Pro Ala Lys Ala Asn Gly  
 65 70 75 80

Xaa Glu Asn Gly His Val Lys Ser Asn Gly Asp Leu Ser Pro Lys Gly

520

[illegible]

<210> 518

<211> 430

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 518

Gln Arg Gly Ala Arg Asp Ile Trp Pro Glu Xaa Leu Ser Gly Pro Thr  
1 5 10 15

Arg Ala Pro Gly Ser Ala Ala Leu Pro Gly Ser Lys Gly Asp Thr Gly  
20 25 30

521

Asn Pro Gly Ala Pro Gly Thr Pro Gly Thr Lys Gly Trp Ala Gly Asp  
 35 40 45  
 Ser Gly Pro Gln Gly Arg Pro Gly Val Phe Gly Leu Pro Gly Glu Lys  
 50 55 60  
 Gly Pro Arg Gly Glu Gln Gly Phe Met Gly Asn Thr Gly Pro Thr Gly  
 65 70 75 80  
 Ala Val Gly Asp Arg Gly Pro Lys Gly Pro Lys Gly Asp Pro Gly Phe  
 85 90 95  
 Pro Gly Ala Pro Gly Thr Val Gly Ala Pro Gly Ile Ala Gly Ile Pro  
 100 105 110  
 Gln Lys Ile Ala Val Gln Pro Gly Thr Val Gly Pro Gln Gly Arg Arg  
 115 120 125  
 Gly Pro Pro Gly Ala Pro Gly Glu Met Gly Pro Gln Gly Pro Pro Gly  
 130 135 140  
 Glu Pro Gly Phe Arg Gly Ala Pro Gly Lys Ala Gly Pro Gln Gly Arg  
 145 150 155 160  
 Gly Gly Val Ser Ala Val Pro Gly Phe Arg Gly Asp Glu Gly Pro Ile  
 165 170 175  
 Gly His Gln Gly Pro Ile Gly Gln Glu Gly Ala Pro Gly Arg Pro Gly  
 180 185 190  
 Ser Pro Gly Leu Pro Gly Met Pro Gly Arg Ser Val Ser Ile Gly Tyr  
 195 200 205  
 Leu Leu Val Lys His Ser Gln Thr Asp Gln Glu Pro Met Cys Pro Val  
 210 215 220  
 Gly Met Asn Lys Leu Trp Ser Gly Tyr Ser Leu Leu Tyr Phe Glu Gly  
 225 230 235 240  
 Gln Glu Lys Ala His Asn Gln Asp Leu Gly Leu Ala Gly Ser Cys Leu  
 245 250 255  
 Ala Arg Phe Ser Thr Met Pro Phe Leu Tyr Cys Asn Pro Gly Asp Val  
 260 265 270  
 Cys Tyr Tyr Ala Ser Arg Asn Asp Lys Ser Tyr Trp Leu Ser Thr Thr  
 275 280 285  
 Ala Pro Leu Pro Met Met Pro Val Ala Glu Asp Glu Ile Lys Pro Tyr  
 290 295 300

522

Ile Ser Arg Cys Ser Val Cys Glu Ala Pro Ala Ile Ala Ile Ala Val  
 305 310 315 320

His Ser Gln Asp Val Ser Ile Pro His Cys Pro Ala Gly Trp Arg Ser  
 325 330 335

Leu Trp Ile Gly Tyr Ser Phe Leu Met His Thr Ala Ala Gly Asp Glu  
 340 345 350

Gly Gly Gly Gln Ser Leu Val Ser Pro Gly Ser Cys Leu Glu Asp Phe  
 355 360 365

Arg Ala Thr Pro Phe Ile Glu Cys Asn Gly Gly Arg Gly Thr Cys His  
 370 375 380

Tyr Tyr Ala Asn Lys Tyr Ser Phe Trp Leu Thr Thr Ile Pro Glu Gln  
 385 390 395 400

Ser Phe Gln Gly Ser Pro Ser Ala Asp Thr Leu Lys Ala Gly Leu Ile  
 405 410 415

Arg Thr His Ile Ser Arg Cys Gln Val Cys Met Lys Asn Leu  
 420 425 430

<210> 519

<211> 68

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 519

Ser Cys Phe Leu Arg Lys Asp Leu Ser Asn Trp Gln Leu Gln Arg His  
 1 5 10 15

Tyr Phe Leu Thr Val Leu Tyr His Val Leu Leu Leu Thr Leu Gln Lys  
 20 25 30

Gly Ser Gly Arg Glu Thr Val Ser Leu Phe Tyr Leu Phe Ser Leu Lys  
 35 40 45

Tyr Lys Ser Ile Pro Thr Asn His Leu Leu Trp Ser Ala Cys Phe Thr  
 50 55 60

Cys Pro Leu Xaa  
 65

523

<210> 520  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (55)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 520  
 Pro Arg Ser Pro Thr Gly Glu Trp Leu Pro Arg Asp Ser Glu Cys His  
     1                    5                    10                    15  
 Leu Cys Met Ser Val Thr Thr Gln Ala Gly Asn Ser Ser Glu Gln Ala  
                     20                    25                    30  
 Ile Pro Gln Ala Met Leu Gln Ala Cys Xaa Gly Ser Trp Leu Asp Arg  
                     35                    40                    45  
 Glu Lys Cys Lys Gln Phe Xaa Glu Gln His Thr Pro Gln Leu Leu Thr  
                     50                    55                    60  
 Leu Val Pro Arg Gly Trp Asp Ala His Thr Thr Cys Gln Ala Leu Gly  
                     65                    70                    75                    80  
 Val Cys Gly Thr Met Ser Ser Pro Leu Gln Cys Ile His Ser Pro Asp  
                     85                    90                    95  
 Leu

<210> 521  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (105)  
 <223> Xaa equals any of the naturally occurring L-amino acids

524

&lt;400&gt; 521

```

Ser Gln Gly Leu Gly Asn Gly Gly Val Ala Gly Ser Ser Gly Gln Val
 1             5             10             15

Arg Thr Pro Ser Ala Gly Gln Val Ser Pro Phe Pro Pro Gln Ala Ser
      20             25             30

Leu Pro Gln Pro Ser Glu Arg Arg Arg Phe Arg Gly Ser Arg Ala Gly
      35             40             45

Gly Glu Lys Gln Thr Pro Ser Gln Gln Arg Gly Arg Met Gly Ala Gly
      50             55             60

Glu Leu Ala Lys Val Thr Ser Ser Arg Gly Glu Pro Arg Leu Arg Lys
      65             70             75             80

Ala Gly Gly Leu Trp Ala Arg Ser Arg Gln Lys Glu Gln Glu Gly Arg
      85             90             95

Glu Gly Ala Gln Gly Trp Pro Ala Xaa Gly Pro Ala Cys His Leu His
      100             105             110

Pro Pro Gln Phe His Phe Ser
      115

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&lt;210&gt; 522

&lt;211&gt; 262

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 522

```

Ala Arg Glu Arg Thr Asp Leu Trp Val Leu Gly Gly His Gly Ala Thr
 1             5             10             15

Arg Cys Met Arg Xaa Pro Arg Gly Gln Arg Pro Glu Ser Ala Leu Pro
      20             25             30

Val Ala Gly Ser Gly Arg Arg Ser Asp Pro Gly His Tyr Ser Phe Ser
      35             40             45

Met Arg Ser Pro Glu Leu Ala Leu Pro Arg Gly Met Gln Pro Thr Glu
      50             55             60

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525

Phe Phe Gln Ser Leu Gly Gly Asp Gly Glu Arg Asn Val Gln Ile Glu  
 65 70 75 80  
 Met Ala His Gly Thr Thr Thr Leu Ala Phe Lys Phe Gln His Gly Val  
 85 90 95  
 Ile Ala Ala Val Asp Ser Arg Ala Ser Ala Gly Ser Tyr Ile Ser Ala  
 100 105 110  
 Leu Arg Val Asn Lys Val Ile Glu Ile Asn Pro Tyr Leu Leu Gly Thr  
 115 120 125  
 Met Ser Gly Cys Ala Ala Asp Cys Gln Tyr Trp Glu Arg Leu Leu Ala  
 130 135 140  
 Lys Glu Cys Arg Leu Tyr Tyr Leu Arg Asn Gly Glu Arg Ile Ser Val  
 145 150 155 160  
 Ser Ala Ala Ser Lys Leu Leu Ser Asn Met Met Cys Gln Tyr Arg Gly  
 165 170 175  
 Met Gly Leu Ser Met Gly Ser Met Ile Cys Gly Trp Asp Lys Lys Gly  
 180 185 190  
 Pro Gly Leu Tyr Tyr Val Asp Glu His Gly Thr Arg Leu Ser Gly Asn  
 195 200 205  
 Met Phe Ser Thr Gly Ser Gly Asn Thr Tyr Ala Tyr Gly Val Met Asp  
 210 215 220  
 Ser Gly Tyr Arg Pro Asn Leu Ser Pro Glu Glu Ala Tyr Asp Leu Gly  
 225 230 235 240  
 Arg Arg Leu Leu Leu Met Pro Leu Thr Glu Thr Ala Ile Leu Glu Ala  
 245 250 255  
 Leu Ser Ile Cys Thr Thr  
 260

&lt;210&gt; 523

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 523

Thr Arg Arg Thr Cys Asp Phe Thr Val Ile Leu Leu Pro Ala Arg Ala  
 1 5 10 15

His Leu Ala Met Ala Met Phe Ala Leu Asn Gly Gly Glu Ser Leu Ser

526

20 25 30  
 Leu Leu Asp Gln Ile Leu Leu His Tyr Tyr Thr Ser Thr Leu Phe Ile  
 35 40 45  
 Trp Gly Trp Ala Gly Ser Asp Ser Ser Leu Val Val Gln Leu Pro Asp  
 50 55 60  
 Tyr Cys Pro Ile Leu Leu Glu Ala His Val Cys Gln Gly Val Val Cys  
 65 70 75 80  
 Thr Ala Val Phe Gly Thr Ser Ser Leu Phe Ser Ala Ile Ser Phe Pro  
 85 90 95  
 Tyr Leu Ser Phe Ser Val Asp Phe Ile His His Arg Thr Glu  
 100 105 110

<210> 524  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 524  
 Leu Glu Lys Glu Glu Tyr Ala Thr Glu Thr Val Cys Ser Leu Gln Ser  
 1 5 10 15  
 Leu Lys Cys Leu Leu Ser Gly Leu Gly Val Cys Leu Pro Cys Ser Arg  
 20 25 30  
 Leu Ser Ala Ser Gly Thr Val Val Gln Tyr Ser Gly Thr Ala Gln Leu  
 35 40 45  
 His Phe Ser Ala Arg  
 50

<210> 525  
 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<400> 525  
 Arg Ser Cys Ser Gly Cys Ala Arg Ser Gly Leu Arg Arg Glu Val Pro  
 1 5 10 15  
 Arg Gln Arg Glu Ala Pro Pro Pro Pro Arg Ser Val Leu His Leu  
 20 25 30



527

Ser Ala Thr Leu Ala Gly Ala Ala Ala Ala Arg Gly Thr Leu Asn Met  
 35 40 45  
 Ser Gly Ile Ala Leu Ser Arg Leu Ala Gln Glu Arg Lys Ala Trp Arg  
 50 55 60  
 Lys Asp His Pro Phe Gly Phe Val Ala Val Pro Thr Lys Asn Pro Asp  
 65 70 75 80  
 Gly Thr Met Asn Leu Met Asn Trp Glu Cys Ala Ile Pro Gly Lys Lys  
 85 90 95  
 Gly Thr Pro Trp Glu Gly Gly Leu Phe Lys Leu Arg Met Leu Phe Lys  
 100 105 110  
 Asp Asp Tyr Pro Ser Ser Pro Pro Lys Cys Lys Phe Glu Pro Pro Leu  
 115 120 125  
 Phe His Pro Asn Val Tyr Pro Ser Gly Thr Val Cys Leu Ser Ile Leu  
 130 135 140  
 Glu Glu Asp Lys Asp Trp Arg Pro Ala Ile Thr Ile Lys Gln Ile Leu  
 145 150 155 160  
 Leu Gly Ile Gln Glu Leu Leu Asn Glu Pro Asn Ile Gln Asp Pro Ala  
 165 170 175  
 Gln Ala Glu Ala Tyr Thr Ile Tyr Cys Gln Asn Arg Val Glu Tyr Glu  
 180 185 190  
 Lys Arg Val Arg Ala Gln Ala Lys Lys Phe Ala Pro Ser  
 195 200 205

&lt;210&gt; 526

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 526

Phe Gly Arg Ala Arg Leu Ile Glu Asp Asn Glu Tyr Thr Ala Arg Gln  
 1 5 10 15  
 Gly Ala Lys Phe Pro Ile Lys Trp Thr Ala Pro Glu Ala Ala Leu Tyr  
 20 25 30  
 Gly Arg Phe Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu  
 35 40 45  
 Thr Glu Leu Val Thr Lys Gly Arg Val Pro Tyr Pro Gly Met Asn Asn

528

50                      55                      60  
 Arg Glu Val Leu Glu Gln Val Glu Arg Gly Tyr Arg Met Pro Cys Pro  
 65                      70                      75                      80  
 Gln Thr Ala Pro Ser Leu Cys Met Ser Ser  
                     85                      90

&lt;210&gt; 527

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 527

Ala Trp Ser Ile Met Ala Asp Met Gln Asn Leu Val Glu Arg Leu Glu  
 1                      5                      10                      15  
 Arg Ala Val Gly Arg Leu Glu Ala Val Ser His Thr Ser Asp Met His  
                     20                      25                      30  
 Arg Gly Tyr Ala Asp Ser Pro Ser Lys Ala Gly Ala Ala Pro Tyr Val  
                     35                      40                      45  
 Gln Ala Phe Asp Ser Leu Leu Ala Gly Pro Val Ala Glu Tyr Leu Lys  
                     50                      55                      60  
 Ile Ser Lys Glu Ile Gly Gly Asp Val Gln Lys His Ala Glu Met Val  
 65                      70                      75                      80  
 His Thr Gly Leu Lys Leu Glu Arg Ala Leu Leu Val Thr Ala Ser Gln  
                     85                      90                      95  
 Cys Gln Gln Pro Ala Glu Asn Lys Leu Ser Asp Leu Leu Ala Pro Ile  
                     100                      105                      110  
 Ser Glu Gln Ile Lys Glu Val Ile Thr Phe Arg Glu Lys Asn Arg Gly  
                     115                      120                      125  
 Ser Lys Leu Phe Asn His Leu Ser Ala Val Ser Glu Ser Ile Gln Ala  
                     130                      135                      140  
 Leu Gly Trp Val Ala Met Ala Pro Lys Pro Gly Pro Tyr Val Lys Glu  
 145                      150                      155                      160  
 Met Asn Asp Ala Ala Met Phe Tyr Thr Asn Arg Val Leu Lys Glu Tyr  
                     165                      170                      175  
 Lys Asp Val Asp Lys Lys His Val Asp Trp Val Lys Ala Tyr Leu Ser  
                     180                      185                      190

Ile	Trp	Thr	Glu	Leu	Gln	Ala	Tyr	Ile	Lys	Glu	Phe	His	Thr	Thr	Gly
195						200			205						
Leu	Ala	Trp	Ser	Lys	Thr	Gly	Pro	Val	Ala	Lys	Glu	Leu	Ser	Gly	Leu
210						215			220						
Pro	Ser	Gly	Pro	Ser	Ala	Gly	Ser	Gly	Pro	Pro	Pro	Pro	Pro	Pro	Gly
225						230			235			240			
Pro	Pro	Pro	Pro	Pro	Val	Ser	Thr	Ser	Ser	Gly	Ser	Asp	Glu	Ser	Ala
			245						250			255			
Ser	Arg	Ser	Ala	Leu	Phe	Ala	Gln	Ile	Asn	Gln	Gly	Glu	Ser	Ile	Thr
			260						265			270			
His	Ala	Leu	Lys	His	Val	Ser	Asp	Asp	Met	Lys	Thr	His	Lys	Asn	Pro
275						280						285			
Ala	Leu	Lys	Ala	Gln	Ser	Gly	Pro	Val	Arg	Ser	Gly	Pro	Lys	Pro	Phe
290						295			300						
Ser	Ala	Pro	Lys	Pro	Gln	Thr	Ser	Pro	Ser	Pro	Lys	Arg	Ala	Thr	Lys
305						310			315			320			
Lys	Glu	Pro	Ala	Val	Leu	Glu	Leu	Glu	Gly	Lys	Lys	Trp	Arg	Val	Glu
			325						330			335			
Asn	Gln	Glu	Asn	Val	Ser	Asn	Leu	Val	Ile	Glu	Asp	Thr	Glu	Leu	Lys
			340						345			350			
Gln	Val	Ala	Tyr	Ile	Tyr	Lys	Cys	Val	Asn	Thr	Thr	Leu	Gln	Ile	Lys
355						360						365			
Gly	Lys	Ile	Asn	Ser	Ile	Thr	Val	Asp	Asn	Cys	Lys	Lys	Leu	Gly	Leu
370						375			380						
Val	Phe	Asp	Asp	Val	Val	Gly	Ile	Val	Glu	Ile	Ile	Asn	Ser	Lys	Asp
385						390			395			400			
Val	Lys	Val	Gln	Val	Met	Gly	Lys	Val	Pro	Thr	Ile	Ser	Ile	Asn	Lys
			405						410			415			
Thr	Asp	Gly	Cys	His	Ala	Tyr	Leu	Ser	Lys	Asn	Ser	Leu	Asp	Cys	Glu
			420						425			430			
Ile	Val	Ser	Ala	Lys	Ser	Ser	Glu	Met	Asn	Val	Leu	Ile	Pro	Thr	Glu
435						440						445			
Gly	Gly	Asp	Phe	Asn	Glu	Phe	Pro	Val	Pro	Glu	Gln	Phe	Lys	Thr	Leu
450						455			460						

Ile Leu Glu Asn Thr Met Glu Asp His Ala Ala Glu Ala Ser Gly Lys  
35 40 45

Pro	Leu	Gly	Glu	Ile	Ser	Val	Pro	Leu	Asp	Ser	Ser	Leu	Leu	Cys	Thr	50	55	60	
Leu	Ser	Ser	Glu	Ser	His	Gln	Glu	Ala	Ala	Ser	Asn	Glu	Asn	Asp	Lys	65	70	75	80
Lys	Xaa	Gly	Asn	Tyr	Lys	Ser	Met	Leu	Arg	Pro	Glu	Val	Gly	Thr	Thr	85	90	95	
Ser	Gln	Asp	Ser	Ala	Leu	Leu	Asp	Gln	Glu	Leu	Tyr	Asn	Ser	Phe	His	100	105	110	
Phe	Trp	Arg	Thr	Pro	Leu	Pro	Glu	Ile	Asp	Leu	Asp	Ile	Glu	Leu	Glu	115	120	125	
Gln	Asn	Ser	Gly	Gly	Lys	Pro	Ser	Pro	Glu	Gly	Pro	Glu	Glu	Glu	Ser	130	135	140	
Glu	Gly	Pro	Val	Pro	Ser	Ser	Pro	Asn	Ile	Thr	Met	Ala	Thr	Arg	Lys	145	150	155	160
Glu	Leu	Glu	Glu	Met	Ile	Glu	Asn	Leu	Glu	Pro	His	Ile	Asp	Asp	Pro	165	170	175	
Asp	Val	Lys	Ala	Gln	Val	Glu	Val	Leu	Ser	Ala	Ala	Leu	Arg	Xaa	Ser	180	185	190	
Ser	Leu	Asp	Ala	His	Glu	Glu	Thr	Ile	Ser	Ile	Glu	Lys	Arg	Ser	Asp	195	200	205	
Leu	Gln	Asp	Glu	Leu	Asp	Ile	Asn	Glu	Leu	Pro	Asn	Cys	Lys	Ile	Asn	210	215	220	
Gln	Glu	Asp	Ser	Val	Pro	Leu	Ile	Ser	Asp	Ala	Val	Glu	Asn	Met	Asp	225	230	235	240
Ser	Thr	Leu	His	Tyr	Ile	His	Xaa	Asp	Ser	Asp	Leu	Ser	Asn	Asn	Ser	245	250	255	
Ser	Phe	Ser	Pro	Asp	Glu	Glu	Arg	Arg	Thr	Lys	Val	Gln	Asp	Val	Val	260	265	270	
Pro	Gln	Ala	Leu	Leu	Asp	Gln	Tyr	Leu	Ser	Met	Thr	Asp	Pro	Ser	Arg	275	280	285	
Ala	Gln	Thr	Val	Asp	Thr	Glu	Ile	Ala	Lys	His	Cys	Ala	Tyr	Ser	Leu	290	295	300	
Pro	Gly	Val	Ala	Leu	Thr	Leu	Gly	Arg	Gln	Asn	Trp	His	Cys	Leu	Arg	305	310	315	320

532

Glu	Thr	Tyr	Xaa	Thr	Leu	Ala	Ser	Asp	Met	Gln	Trp	Lys	Val	Arg	Arg	325	330	335	
Thr	Leu	Ala	Phe	Ser	Ile	His	Glu	Leu	Ala	Val	Ile	Leu	Gly	Asp	Gln	340	345	350	
Leu	Thr	Ala	Ala	Asp	Leu	Val	Pro	Ile	Phe	Asn	Gly	Phe	Leu	Lys	Asp	355	360	365	
Leu	Asp	Glu	Val	Arg	Ile	Gly	Val	Leu	Lys	His	Leu	His	Asp	Phe	Leu	370	375	380	
Lys	Leu	Leu	His	Ile	Asp	Lys	Arg	Arg	Glu	Tyr	Leu	Tyr	Gln	Leu	Gln	385	390	395	400
Glu	Phe	Leu	Val	Thr	Asp	Asn	Ser	Arg	Asn	Trp	Arg	Phe	Arg	Ala	Glu	405	410	415	
Leu	Ala	Glu	Gln	Leu	Ile	Leu	Leu	Leu	Glu	Leu	Tyr	Ser	Pro	Arg	Asp	420	425	430	
Val	Tyr	Asp	Tyr	Leu	Arg	Pro	Ile	Ala	Leu	Asn	Leu	Cys	Ala	Asp	Lys	435	440	445	
Val	Ser	Ser	Val	Arg	Trp	Ile	Ser	Tyr	Lys	Leu	Val	Ser	Glu	Met	Val	450	455	460	
Lys	Lys	Leu	His	Ala	Ala	Thr	Pro	Pro	Thr	Phe	Gly	Val	Asp	Leu	Ile	465	470	475	480
Asn	Glu	Leu	Val	Glu	Asn	Phe	Gly	Arg	Cys	Pro	Lys	Trp	Ser	Gly	Arg	485	490	495	
Gln	Ala	Phe	Val	Phe	Val	Cys	Gln	Thr	Val	Ile	Glu	Asp	Asp	Cys	Leu	500	505	510	
Pro	Met	Asp	Gln	Phe	Ala	Val	His	Leu	Met	Pro	His	Leu	Leu	Thr	Leu	515	520	525	
Ala	Asn	Asp	Arg	Val	Pro	Asn	Val	Arg	Val	Leu	Leu	Ala	Lys	Thr	Leu	530	535	540	
Arg	Gln	Thr	Leu	Leu	Glu	Lys	Asp	Tyr	Phe	Leu	Ala	Ser	Ala	Ser	Cys	545	550	555	560
His	Gln	Glu	Ala	Val	Glu	Gln	Thr	Ile	Met	Ala	Leu	Gln	Met	Asp	Arg	565	570	575	
Asp	Ser	Asp	Val	Lys	Tyr	Phe	Ala	Ser	Ile	His	Pro	Ala	Ser	Thr	Lys	580	585	590	

533

Ile Ser Glu Asp Ala Met Ser Thr Ala Ser Ser Thr Tyr  
           595                                600                                605

&lt;210&gt; 529

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 529

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser  
       1                                5                                10                                15

Thr His Ala Ser Glu Leu Gly Thr Ser Leu Ser Ala Met Arg Phe Leu  
                                 20                                25                                30

Ala Ala Thr Phe Leu Leu Leu Ala Leu Ser Thr Ala Ala Gln Ala Glu  
                                 35                                40                                45

Pro Val Gln Phe Lys Asp Cys Gly Ser Val Asp Gly Val Ile Lys Glu  
                                 50                                55                                60

Val Asn Val Ser Pro Cys Pro Thr Gln Pro Cys Gln Leu Ser Lys Gly  
       65                                70                                75                                80

Gln Ser Tyr Ser Val Asn Val Thr Phe Thr Ser Asn Ile Gln Ser Lys  
                                 85                                90                                95

Ser Ser Lys Ala Val Val His Gly Ile Leu Met Gly Val Pro Val Pro  
                                 100                                105                                110

Phe Pro Ile Pro Glu Pro Asp Gly Cys Lys Ser Gly Ile Asn Cys Pro  
                                 115                                120                                125

Ile Gln Lys Asp Lys Thr Tyr Ser Tyr Leu Asn Lys Leu Pro Val Lys  
       130                                135                                140

Ser Glu Tyr Pro Ser Ile Lys Leu Val Val Glu Trp Gln Leu Gln Asp  
       145                                150                                155                                160

Asp Lys Asn Gln Ser Leu Phe Cys Trp Glu Ile Pro Val Gln Ile Val  
                                 165                                170                                175

Ser His Leu

&lt;210&gt; 530

&lt;211&gt; 168

534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (167)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 530

Val Arg Ala Glu His Cys Ala Val Trp Glu Arg Asn Phe Glu Glu Thr  
 1 5 10 15

Val Arg Trp Phe Trp Arg Leu Gly Ser Pro Arg Pro Val Gly Ser His  
 20 25 30

Leu Thr Ser Val Lys Phe Leu Met Thr Ser Pro Glu Ile Ala Ser Leu  
 35 40 45

Ser Trp Gly Gln Met Lys Val Lys Gly Ser Asn Thr Thr Tyr Lys Asp  
 50 55 60

Cys Lys Val Trp Pro Gly Gly Ser Arg Thr Trp Asp Trp Arg Glu Thr  
 65 70 75 80

Gly Thr Glu His Ser Pro Gly Val Gln Pro Ala Asp Val Lys Glu Val  
 85 90 95

Val Glu Lys Gly Val Gln Thr Leu Val Ile Gly Arg Gly Met Ser Glu  
 100 105 110

Ala Leu Lys Val Pro Ser Ser Thr Val Glu Tyr Leu Lys Lys His Gly  
 115 120 125

Ile Asp Val Arg Val Leu Gln Thr Glu Gln Ala Val Lys Glu Tyr Asn  
 130 135 140

Ala Leu Val Ala Lys Gly Ser Gly Trp Glu Val Ser Ser Ile Pro Pro  
 145 150 155 160

Ala Asp Gly Ala Leu Arg Xaa Glu  
 165

&lt;210&gt; 531

&lt;211&gt; 705

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 531

Glu Pro Arg Ala Arg Ala Thr Arg Arg Gly Met Ala Ala Thr Gly Thr



535

1	5	10	15
Ala Ala Ala Ala Ala Thr Gly Arg Leu Leu Leu Leu Leu Val Gly	20	25	30
Leu Thr Ala Pro Ala Leu Ala Leu Ala Gly Tyr Ile Glu Ala Leu Ala	35	40	45
Ala Asn Ala Gly Thr Gly Phe Ala Val Ala Glu Pro Gln Ile Ala Met	50	55	60
Phe Cys Gly Lys Leu Asn Met His Val Asn Ile Gln Thr Gly Lys Trp	65	70	75
Glu Pro Asp Pro Thr Gly Thr Lys Ser Cys Phe Glu Thr Lys Glu Glu	85	90	95
Val Leu Gln Tyr Cys Gln Glu Met Tyr Pro Glu Leu Gln Ile Thr Asn	100	105	110
Val Met Glu Ala Asn Gln Arg Val Ser Ile Asp Asn Trp Cys Arg Arg	115	120	125
Asp Lys Lys Gln Cys Lys Ser Arg Phe Val Thr Pro Phe Lys Cys Leu	130	135	140
Val Gly Glu Phe Val Ser Asp Val Leu Leu Val Pro Glu Lys Cys Gln	145	150	155
Phe Phe His Lys Glu Arg Met Glu Val Cys Glu Asn His Gln His Trp	165	170	175
His Thr Val Val Lys Glu Ala Cys Leu Thr Gln Gly Met Thr Leu Tyr	180	185	190
Ser Tyr Gly Met Leu Leu Pro Cys Gly Val Asp Gln Phe His Gly Thr	195	200	205
Glu Tyr Val Cys Cys Pro Gln Thr Lys Ile Ile Gly Ser Val Ser Lys	210	215	220
Glu Glu Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu Asp Glu Glu	225	230	235
Glu Asp Tyr Asp Val Tyr Lys Ser Glu Phe Pro Thr Glu Ala Asp Leu	245	250	255
Glu Asp Phe Thr Glu Ala Ala Val Asp Glu Asp Asp Glu Asp Glu Glu	260	265	270
Glu Gly Glu Glu Val Val Glu Asp Arg Asp Tyr Tyr Tyr Asp Thr Phe			

536

275		280		285
Lys Gly Asp Asp Tyr Asn Glu Glu Asn Pro Thr Glu Pro Gly Ser Asp				
290		295		300
Gly Thr Met Ser Asp Lys Glu Ile Thr His Asp Val Lys Val Pro Pro				
305		310		315 320
Thr Pro Leu Pro Thr Asn Asp Val Asp Val Tyr Phe Glu Thr Ser Ala				
		325		330 335
Asp Asp Asn Glu His Ala Arg Phe Gln Lys Ala Lys Glu Gln Leu Glu				
		340		345 350
Ile Arg His Arg Asn Arg Met Asp Arg Val Lys Lys Glu Trp Glu Glu				
		355		360 365
Ala Glu Leu Gln Ala Lys Asn Leu Pro Lys Ala Glu Arg Gln Thr Leu				
		370		375 380
Ile Gln His Phe Gln Ala Met Val Lys Ala Leu Glu Lys Glu Ala Ala				
385		390		395 400
Ser Glu Lys Gln Gln Leu Val Glu Thr His Leu Ala Arg Val Glu Ala				
		405		410 415
Met Leu Asn Asp Arg Arg Arg Met Ala Leu Glu Asn Tyr Leu Ala Ala				
		420		425 430
Leu Gln Ser Asp Pro Pro Arg Pro His Arg Ile Leu Gln Ala Leu Arg				
		435		440 445
Arg Tyr Val Arg Ala Glu Asn Lys Asp Arg Leu His Thr Ile Arg His				
		450		455 460
Tyr Gln His Val Leu Ala Val Asp Pro Glu Lys Ala Ala Gln Met Lys				
465		470		475 480
Ser Gln Val Met Thr His Leu His Val Ile Glu Glu Arg Arg Asn Gln				
		485		490 495
Ser Leu Ser Leu Leu Tyr Lys Val Pro Tyr Val Ala Gln Glu Ile Gln				
		500		505 510
Glu Glu Ile Asp Glu Leu Leu Gln Glu Gln Arg Ala Asp Met Asp Gln				
		515		520 525
Phe Thr Ala Ser Ile Ser Glu Thr Pro Val Asp Val Arg Val Ser Ser				
		530		535 540
Glu Glu Ser Glu Glu Ile Pro Pro Phe His Pro Phe His Pro Phe Pro				

537

545                      550                      555                      560  
 Ala Leu Pro Glu Asn Glu Gly Ser Gly Val Gly Glu Gln Asp Gly Gly  
                                  565                      570                      575  
 Leu Ile Gly Ala Glu Glu Lys Val Ile Asn Ser Lys Asn Lys Val Asp  
                                  580                      585                      590  
 Glu Asn Met Val Ile Asp Glu Thr Leu Asp Val Lys Glu Met Ile Phe  
                                  595                      600                      605  
 Asn Ala Glu Arg Val Gly Gly Leu Glu Glu Glu Arg Glu Ser Val Gly  
                                  610                      615                      620  
 Pro Leu Arg Glu Asp Phe Ser Leu Ser Ser Ser Ala Leu Ile Gly Leu  
 625                                   630                                   635                                   640  
 Leu Val Ile Ala Val Ala Ile Ala Thr Val Ile Val Ile Ser Leu Val  
                                  645                                   650                                   655  
 Met Leu Arg Lys Arg Gln Tyr Gly Thr Ile Ser His Gly Ile Val Glu  
                                  660                                   665                                   670  
 Val Asp Pro Met Leu Thr Pro Glu Glu Arg His Leu Asn Lys Met Gln  
                                  675                                   680                                   685  
 Asn His Gly Tyr Glu Asn Pro Thr Tyr Lys Tyr Leu Glu Gln Met Gln  
                                  690                                   695                                   700  
 Ile  
 705

&lt;210&gt; 532

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 532

Ser Arg Leu Pro Glu Pro Pro Gly Phe Leu Val Lys Phe Ala Glu Glu  
 1                      5                      10                      15  
 Asp Leu Ser Val Leu Thr Tyr Met Leu His Arg Thr Asn Glu Ser Leu  
                                  20                      25                      30

538

Arg Gln Ser Phe Phe Thr Gln Gln Arg Leu Ile Phe Phe His Pro Leu  
                   35                                  40                                  45

Leu Gly Xaa Lys His Ser Cys Pro Ala Cys Leu His Phe Lys His Asp  
           50                                  55                                  60

Gln Asn Cys Ala Ser Leu Gln Ile Thr Thr Asp Gln Gln Trp Gly Pro  
       65                                  70                                  75                                  80

Ala Ser

<210> 533  
 <211> 283  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (27)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 533  
 Lys Arg Phe Leu Lys Arg Ile Arg Asp Leu Gly Glu Gly His Phe Gly  
       1                                  5                                  10                                  15

Lys Val Glu Leu Cys Arg Tyr Asp Pro Glu Xaa Xaa Asn Thr Gly Glu  
                   20                                  25                                  30

Gln Val Ala Val Lys Ser Leu Lys Pro Glu Ser Gly Gly Asn His Ile  
                   35                                  40                                  45

Ala Asp Leu Lys Lys Glu Ile Glu Ile Leu Arg Asn Leu Tyr His Glu  
           50                                  55                                  60

Asn Ile Val Lys Tyr Lys Gly Ile Cys Thr Glu Asp Gly Gly Asn Gly  
       65                                  70                                  75                                  80

Ile Lys Leu Ile Met Glu Phe Leu Pro Ser Gly Ser Leu Lys Glu Tyr  
                   85                                  90                                  95

Leu Pro Lys Asn Lys Asn Lys Ile Asn Leu Lys Gln Gln Leu Lys Tyr  
                   100                                  105                                  110

539

Ala Val Gln Ile Cys Lys Gly Met Asp Tyr Leu Gly Ser Arg Gln Tyr  
 115 120 125

Val His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Glu Ser Glu His  
 130 135 140

Gln Val Lys Ile Gly Asp Phe Gly Leu Thr Lys Ala Ile Glu Thr Asp  
 145 150 155 160

Lys Glu Tyr Tyr Thr Val Lys Asp Asp Arg Asp Ser Pro Val Phe Trp  
 165 170 175

Tyr Ala Pro Glu Cys Leu Met Gln Ser Lys Phe Tyr Ile Ala Ser Asp  
 180 185 190

Val Trp Ser Phe Gly Val Thr Leu His Glu Leu Leu Thr Tyr Cys Asp  
 195 200 205

Ser Asp Ser Ser Pro Met Ala Leu Phe Leu Lys Met Ile Gly Pro Thr  
 210 215 220

His Gly Gln Met Thr Val Thr Arg Leu Val Asn Thr Leu Lys Glu Gly  
 225 230 235 240

Lys Arg Leu Pro Cys Pro Pro Asn Cys Pro Asp Glu Val Tyr Gln Leu  
 245 250 255

Met Arg Lys Cys Trp Glu Phe Gln Pro Ser Asn Arg Thr Ser Phe Gln  
 260 265 270

Asn Leu Ile Glu Gly Phe Glu Ala Leu Leu Lys  
 275 280

&lt;210&gt; 534

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 534

Phe Arg Ala Glu Arg Glu Glu Asn Phe Phe Leu Ala Trp Ala Pro Cys  
 1 5 10 15

Arg Ser Val Cys Gln Pro Ser Ser Pro Ala Tyr Gln Cys Arg Ala Leu  
 20 25 30

Pro Thr Pro Pro Pro Ala Pro Pro Val Ser Ala Met Ala Lys Ala Tyr  
 35 40 45

Asp His Leu Phe Lys Leu Leu Leu Ile Gly Asp Ser Gly Val Gly Lys

540

50                      55                      60  
 Thr Cys Leu Ile Ile Arg Phe Ala Glu Asp Asn Phe Asn Asn Thr Tyr  
 65                      70                      75                      80  
 Ile Ser Thr Ile Gly Ile Asp Phe Lys Ile Arg Thr Val Asp Ile Glu  
                     85                      90                      95  
 Gly Lys Lys Ile Lys Leu Gln Val Trp Asp Thr Ala Gly Gln Glu Arg  
                     100                      105                      110  
 Phe Lys Thr Ile Thr Thr Ala Tyr Tyr Arg Gly Ala Met Gly Ile Ile  
                     115                      120                      125  
 Leu Val Tyr Asp Ile Thr Asp Glu Lys Ser Phe Glu Asn Ile Gln Asn  
                     130                      135                      140  
 Trp Met Lys Ser Ile Lys Glu Asn Ala Ser Ala Gly Val Glu Arg Leu  
 145                      150                      155                      160  
 Leu Leu Gly Asn Lys Cys Asp Met Glu Ala Lys Arg Lys Val Gln Lys  
                     165                      170                      175  
 Glu Gln Ala Asp Lys Leu Ala Arg Glu His Gly Ile Arg Phe Phe Glu  
                     180                      185                      190  
 Thr Ser Ala Lys Ser Ser Met Asn Val Asp Glu Ala Phe Ser Ser Leu  
                     195                      200                      205  
 Ala Arg Asp Ile Leu Leu Lys Ser Gly Gly Arg Arg Ser Gly Asn Gly  
                     210                      215                      220  
 Asn Lys Pro Pro Ser Thr Asp Leu Lys Thr Cys Asp Lys Lys Asn Thr  
 225                      230                      235                      240  
 Asn Lys Cys Ser Leu Gly  
                     245

&lt;210&gt; 535

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 535

Pro Lys Val Phe Phe Asn Ile Leu Glu Glu Ala Arg Glu Leu Ala Leu  
 1                      5                      10                      15

Gln Gln Glu Glu Gly Lys Thr Val Met Tyr Thr Ala Val Gly Ser Glu  
                     20                      25                      30

541

Trp Arg Pro Phe Gly Tyr Pro Arg Arg Arg Gln Pro Leu Asn Ser Val  
 35 40 45  
 Val Leu Gln Gln Gly Leu Ala Asp Arg Ile Val Arg Asp Val Gln Glu  
 50 55 60  
 Phe Ile Asp Asn Pro Lys Trp Tyr Thr Asp Arg Gly Ile Pro Tyr Arg  
 65 70 75 80  
 Arg Gly Tyr Leu Leu Tyr Gly Pro Pro Gly Cys Gly Lys Ser Ser Phe  
 85 90 95  
 Ile Thr Ala Leu Ala Gly Glu Leu Glu His Ser Ile Cys Leu Leu Ser  
 100 105 110  
 Leu Thr Asp Ser Ser Leu Ser Asp Asp Arg Leu Asn His Leu Leu Ser  
 115 120 125  
 Val Ala Pro Gln Gln Ser Leu Val Leu Leu Glu Asp Val Asp Ala Ala  
 130 135 140  
 Phe Leu Ser Arg Asp Leu Ala Val Glu Asn Pro Val Lys Tyr Gln Gly  
 145 150 155 160  
 Leu Gly Arg Leu Thr Phe Ser Gly Leu Leu Asn Ala Leu Asp Gly Val  
 165 170 175  
 Ala Ser Thr Glu Ala Arg Ile Val Phe Met Thr Thr Asn His Val Asp  
 180 185 190  
 Arg Leu Asp Pro Ala Leu Ile Arg Pro Gly Arg Val Asp Leu Lys Glu  
 195 200 205  
 Tyr Val Gly Tyr Cys Ser His Trp Gln Leu Thr Gln Met Phe Gln Arg  
 210 215 220  
 Phe Tyr Pro Gly Gln Ala Pro Ser Leu Ala Glu Asn Phe Ala Glu His  
 225 230 235 240  
 Val Leu Arg Ala Thr Asn Gln Ile Ser Pro Ala Gln Val Gln Gly Tyr  
 245 250 255  
 Phe Met Leu Tyr Lys Asn Asp Pro Val Gly Ala Ile His Asn Ala Glu  
 260 265 270  
 Ser Leu Arg Arg  
 275

542

&lt;210&gt; 536

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 536

Ile	Lys	Cys	Ser	Thr	Met	Cys	Asn	Asp	Cys	Lys	Phe	Ser	Lys	Ile	Leu
1				5					10					15	

Gln	Pro	Phe	His	Glu	Cys	Phe	Thr	Ile	Gln	His	Ser	Ile	Tyr	Tyr	Lys
			20					25					30		

Thr	Pro	Phe	Leu	Tyr	Pro	Tyr	Thr	Ser	Gly	Val	Ala	Val	Asn	Ile	Tyr
		35					40					45			

Tyr	Asp	Ile	Tyr	Phe	Asn	Gln	Asn	Val	Thr	His	Ile	Lys	Cys	Leu	Phe
	50					55					60				

Phe	Lys	Met	Asn	Val	Leu	Cys	Phe
65						70	

&lt;210&gt; 537

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 537

Ala	Tyr	Ile	Ser	Cys	Pro	Ser	Ser	Thr	Val	Asn	Lys	Trp	His	Ala	Cys
1				5					10					15	

Val	Leu	Trp	Pro	Phe	Tyr	Leu	Glu	Tyr	Ser	Leu	Leu	Ala	Glu	Phe	Thr
			20					25					30		

Leu	Val	Val	Lys	Gln	Lys	Leu	Pro	Gly	Val	Tyr	Val	Gln	Pro	Ser	Tyr
		35					40					45			

Arg	Ser	Ala	Leu	Met	Trp	Phe	Gly	Val	Ile	Phe	Ile	Arg	His	Gly	Leu
	50					55					60				

Tyr	Gln	Asp	Gly	Val	Phe	Lys	Phe	Thr	Val	Tyr	Ile	Pro	Asp	Asn	Tyr
65					70					75				80	

Pro	Asp	Gly	Asp	Cys	Pro	Arg	Leu	Val	Phe	Asp	Ile	Pro	Val	Phe	His
				85					90					95	

Pro	Leu	Val	Asp	Pro	Thr	Ser	Gly	Glu	Leu	Asp	Val	Lys	Arg	Ala	Phe
			100					105					110		

Ala	Lys	Trp	Arg	Arg	Asn	His	Asn	His	Ile	Trp	Gln	Val	Leu	Met	Tyr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



543

115	120	125
Ala Arg Arg Val Phe Tyr Lys Ile Asp Thr Ala Ser Pro Leu Asn Pro		
130	135	140
Glu Ala Ala Val Leu Tyr Glu Lys Asp Ile Gln Leu Phe Lys Ser Lys		
145	150	155
Val Val Asp Ser Val Lys Val Cys Thr Ala Arg Leu Phe Asp Gln Pro		
165	170	175
Lys Ile Glu Asp Pro Tyr Ala Ile Ser Phe Ser Pro Trp Asn Pro Ser		
180	185	190
Val His Asp Glu Ala Arg Glu Lys Met Leu Thr Gln Lys Lys Lys Pro		
195	200	205
Glu Glu Gln His Asn Lys Ser Val His Val Ala Gly Leu Ser Trp Val		
210	215	220
Lys Pro Gly Ser Val Gln Pro Phe Ser Lys Glu Glu Lys Thr Val Ala		
225	230	235
240		

Thr

&lt;210&gt; 538

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (23)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

544

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 538

Phe Tyr Met Ala Val Ile His Gly Val Glu Ala Val Arg Lys Glu Ser  
1 5 10 15

Ser Thr Ser Xaa Leu Ser Xaa Val Ser Ser Asp Cys Xaa Glu Lys Trp  
20 25 30

Asp Cys Leu Xaa His Gly Ile Cys Gly Leu Lys Ser Ser Pro Xaa  
35 40 45

<210> 539

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 539

Xaa Val Phe Val Asn Lys Cys Ile Cys Ile Thr Gln Ser Cys Xaa Ile

545

1	5	10	15
Gln Asn Tyr Lys Gln Lys Leu Cys Lys Thr Lys Leu Lys Ala Ala Cys	20	25	30
Leu Leu Phe Phe Val Pro Cys Pro Ile Thr Thr Ser Xaa Ser Lys Asn	35	40	45
Glu Met Leu Leu Leu Xaa Xaa Leu Met Phe Phe Arg Phe Glu Gly Phe	50	55	60
Thr Thr Ser Thr Pro Lys Thr Tyr Phe Ser	65	70	

&lt;210&gt; 540

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 540

Ser Thr Ala Gln Gly Asn Leu Leu Thr Val Phe Ile Gln Pro Arg Ala	1	5	10	15
Ser Met Ser Gly Gly Lys Tyr Val Asp Ser Glu Gly His Leu Tyr Thr	20	25	30	
Val Pro Ile Arg Glu Gln Gly Asn Ile Tyr Lys Pro Asn Asn Lys Ala	35	40	45	
Met Ala Asp Glu Leu Ser Glu Lys Gln Val Tyr Asp Ala His Thr Lys	50	55	60	
Glu Ile Asp Leu Val Asn Arg Asp Pro Lys His Leu Asn Asp Asp Val	65	70	75	80
Val Lys Ile Asp Phe Glu Asp Val Ile Ala Glu Pro Glu Gly Thr His	85	90	95	
Ser Phe Asp Gly Ile Trp Lys Ala Ser Phe Thr Thr Phe Thr Val Thr	100	105	110	
Lys Tyr Trp Phe Tyr Arg Leu Leu Ser Ala Leu Phe Gly Ile Pro Met	115	120	125	
Ala Leu Ile Trp Gly Ile Tyr Phe Ala Ile Leu Ser Phe Leu His Ile	130	135	140	
Trp Ala Val Val Pro Cys Ile Lys Ser Phe Leu Ile Glu Ile Gln Cys	145	150	155	160

546

Ile Ser Arg Val Tyr Ser Ile Tyr Val His Thr Val Cys Asp Pro Leu  
                   165                                  170                                  175

Phe Glu Ala Val Gly Lys Ile Phe Ser Asn Val Arg Ile Asn Leu Gln  
                   180                                  185                                  190

Lys Glu Ile  
           195

<210> 541

<211> 233

<212> PRT

<213> Homo sapiens

<400> 541

Leu Pro Leu Glu Val Ala Met Ala Gly Leu Arg Arg Glu Tyr Ala Phe  
   1                  5                                  10                                  15

Lys Ala Ile Asn Gln Gly Gly Leu Thr Ser Val Ala Val Arg Gly Lys  
                   20                                  25                                  30

Asp Cys Ala Val Ile Val Thr Gln Lys Lys Val Pro Asp Lys Leu Leu  
                   35                                  40                                  45

Asp Ser Ser Thr Val Thr His Leu Phe Lys Ile Thr Glu Asn Ile Gly  
                   50                                  55                                  60

Cys Val Met Thr Gly Met Thr Ala Asp Ser Arg Ser Gln Val Gln Arg  
                   65                                  70                                  75                                  80

Ala Arg Tyr Glu Ala Ala Asn Trp Lys Tyr Lys Tyr Gly Tyr Glu Ile  
                   85                                  90                                  95

Pro Val Asp Met Leu Cys Lys Arg Ile Ala Asp Ile Ser Gln Val Tyr  
                   100                                  105                                  110

Thr Gln Asn Ala Glu Met Arg Pro Leu Gly Cys Cys Met Ile Leu Ile  
                   115                                  120                                  125

Gly Ile Asp Glu Glu Gln Gly Pro Gln Val Tyr Lys Cys Asp Pro Ala  
                   130                                  135                                  140

Gly Tyr Tyr Cys Gly Phe Lys Ala Thr Ala Ala Gly Val Lys Gln Thr  
                   145                                  150                                  155                                  160

Glu Ser Thr Ser Phe Leu Glu Lys Lys Val Lys Lys Lys Phe Asp Trp  
                   165                                  170                                  175

547

Thr Phe Glu Gln Thr Val Glu Thr Ala Ile Thr Cys Leu Ser Thr Val  
                   180                  185                  190

Leu Ser Ile Asp Phe Lys Pro Ser Glu Ile Glu Val Gly Val Val Thr  
                   195                  200                  205

Val Glu Asn Pro Lys Phe Arg Ile Leu Thr Glu Ala Glu Ile Asp Ala  
                   210                  215                  220

His Leu Val Ala Leu Ala Glu Arg Asp  
                   225                  230

&lt;210&gt; 542

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (214)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (215)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 542

Thr Leu Gln Pro Pro Thr Gly Ile Pro Ser Thr Leu Pro Leu Cys Thr  
   1                  5                  10                  15

Ile Ser Thr Leu Trp Ala Pro Thr Lys Tyr Leu Ser Ala Ile Trp Ala  
                   20                  25                  30

Val Gly Gln Ile Ile Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala  
                   35                  40                  45

Leu Gly Phe Gly Ala Gln Leu Pro Pro Asp Trp Lys Val Ser His Glu  
                   50                  55                  60

Phe Ala Ile Asn Phe Asn Pro Thr Asn Pro Phe Cys Ser Gly Val Asp  
   65                  70                  75                  80

Gly Ile Ala Gln Ala Tyr Ser Ala Cys Leu Pro His Ile Arg Phe Tyr

548

85						90						95						
Gly	Pro	Thr	Asn	Phe	Ser	Pro	Ile	Val	Asn	His	Val	Ala	Arg	Phe	Ala			
100						105						110						
Ala	Gln	Ala	Thr	Gln	Gln	Arg	Thr	Ala	Thr	Xaa	Tyr	Phe	Ile	Leu	Leu			
115						120						125						
Ile	Ile	Thr	Asp	Gly	Val	Ile	Ser	Asp	Met	Glu	Glu	Thr	Arg	His	Ala			
130						135						140						
Gly	Cys	Arg	Leu	Pro	Ser	Cys	Pro	Cys	Pro	Ser	Ser	Ser	Trp	Ala	Trp			
145	150						155						160					
Ala	Met	Arg	Thr	Ser	Leu	Pro	Trp	Ser	Ser	Trp	Met	Gly	Thr	Ala	Ala			
165						170						175						
Cys	Cys	Ala	Ser	His	Thr	Gly	Glu	Gly	Gly	Ser	Pro	Arg	Tyr	Cys	Gly			
180						185						190						
Ile	Arg	Ser	Leu	Phe	Glu	Ile	Ser	Ala	Lys	Gln	Gln	Lys	Arg	Thr	Trp			
195						200						205						
Pro	Lys	Leu	Cys	Trp	Xaa	Xaa	Trp	Pro	Gln	Gln	Leu	Leu	His	Tyr	Phe			
210						215						220						
Lys	His	Lys	Lys	Leu	Ala	Pro	Gln	Gln	Ile	Arg								
225	230						235											

<210> 543

<211> 73

<212> PRT

<213> Homo sapiens

<400> 543

Lys His Tyr Gln Val Pro Lys Pro Ile Trp Leu Asn Gln Gln Cys Thr  
1 5 10 15

Glu Ile Leu Val Phe Thr Ser Lys Ala Arg Glu Pro Arg Gly Gly Gly  
20 25 30

Glu Leu Glu Glu Gly Glu Ile Met Gly Arg Gly Trp Arg Leu Pro Glu  
35 40 45

Leu Ala Arg Gly Pro Thr Phe Asp Asn Ser Leu Thr Lys Ser Ile Phe  
50 55 60

Phe Phe Phe Phe Trp Glu Gly Pro Leu  
65 70

<210> 544  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (59)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (77)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (81)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (87)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (102)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 544  
 Ala Trp Thr Glu Ser Ile His Ser Asp His Leu Leu Ser Leu Tyr Thr  
     1                    5                    10                    15  
 Glu Asn Lys Thr Ser Ser Thr His Pro Ile Arg Phe Phe Cys Leu Thr  
                     20                    25                    30  
 Phe Lys Cys Pro Cys Trp Pro Phe Thr Ala Val Pro Arg His Gln Ala  
                     35                    40                    45  
 Ser Cys His Ile Ser His Ser Lys Gly Phe Xaa Thr Ile Ser Ser Cys  
                     50                    55                    60

550

His Phe Leu Lys Lys Thr Ile Pro Lys Leu Lys Leu Xaa Ile Ser Val  
 65 70 75 80

Xaa Ser Cys Val Cys Gln Xaa Leu Gly Phe Xaa Trp Lys Val Pro Lys  
 85 90 95

Thr Lys Ala Thr Pro Xaa  
 100

<210> 545

<211> 115

<212> PRT

<213> Homo sapiens

<400> 545

Phe Arg Phe Leu Ser Asp Cys Gly Val Phe Ala Glu Gly His Ile Glu  
 1 5 10 15

Leu Gln Val Glu Ser Gly Val Pro Leu Gly Phe Ser Thr Met Ala Glu  
 20 25 30

Asp Met Glu Thr Lys Ile Lys Asn Tyr Lys Thr Ala Pro Phe Asp Ser  
 35 40 45

Arg Phe Pro Asn Gln Asn Gln Thr Arg Asn Cys Trp Gln Asn Tyr Leu  
 50 55 60

Asp Phe His Arg Cys Gln Lys Ala Met Thr Ala Lys Gly Gly Asp Ile  
 65 70 75 80

Ser Val Cys Glu Trp Tyr Gln Arg Val Tyr Gln Ser Leu Cys Pro Thr  
 85 90 95

Ser Trp Val Thr Asp Trp Asp Glu Gln Arg Ala Glu Gly Thr Phe Pro  
 100 105 110

Gly Lys Ile  
 115

<210> 546

<211> 112

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)



551

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 546

Pro Ser Gly Cys Pro Ile Pro Xaa Pro Trp Xaa Ile Ser Val Val Ser  
1 5 10 15

Ala Cys Xaa Met Gly Asp Pro His Pro Gln Cys Pro Ser Pro Ser Trp  
20 25 30

Gly Pro Leu Thr Leu His Pro Leu Pro Phe Pro Pro His Leu Pro Gly  
35 40 45

Glu Lys Leu Asp Met Gly Pro Gly Glu Gly Ser Trp Pro Glu Glu Asp  
50 55 60

Pro Phe Pro Val Ala Leu Glu Gly Gly Gly Val Ala Gly Ala Pro Thr  
65 70 75 80

His Ser Pro Ser Leu Gln Thr Pro Asn Pro Gln Ser Val Phe Glu Pro  
85 90 95

Pro Arg Ser Pro His Ala Pro Ala His Ala Pro Ser Val Asn Pro Trp  
100 105 110

<210> 547

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (40)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (118)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (126)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (177)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 547  
 Gly Leu Ser Glu Ser Ala Pro Ser Arg Leu Val Gly Ala Gln Pro Ser  
   1                  5                  10                  15  
  
 Thr Gly Val Pro Leu Val Thr Gly Tyr Thr Thr Tyr Xaa Ala His His  
                   20                  25                  30  
  
 Ser Ala Phe Ser Gln Met Val Xaa Ser Phe Tyr Tyr Gly Gly Lys Leu  
           35                  40                  45  
  
 Val Gly Gln Ala Thr Thr Thr Cys Pro Glu Gly Cys Arg Leu Ser Leu  
   50                  55                  60  
  
 Ser Gln Pro Gly Leu Pro Gly Thr Lys Leu Tyr Gly Pro Glu Gly Leu  
   65                  70                  75                  80  
  
 Glu Leu Val Arg Phe Pro Pro Ala Asp Ala Ile Pro Ser Glu Arg Gln  
                   85                  90                  95  
  
 Arg Gln Val Thr Arg Asn Cys Ser Gly Thr Trp Ser Ala Gly Cys Cys  
           100                  105                  110  
  
 Cys Thr Ala Ala Gly Xaa Ala Cys Ser Ser Ser Gly Cys Xaa Arg Ala  
   115                  120                  125  
  
 Ala Cys Ser Xaa Ala Ala Thr Val Gly Val Gln Arg Gln Ala Gln Gln  
   130                  135                  140

553

Ala Gly Ala Asp Glu Val Val Gln Val Phe Asp Thr Ser Gln Phe Phe  
 145 150 155 160

Arg Glu Leu Gln Gln Phe Tyr Asn Ser Gln Gly Arg Leu Pro Asp Gly  
 165 170 175

Xaa Val Val Leu Cys Phe Gly Glu Glu Phe Arg Ile Trp Pro Pro Cys  
 180 185 190

Ala Pro Asn Ser Phe Ser Cys Arg Leu Ser Ser Cys Met Ser Gly Asn  
 195 200 205

Trp Gln Lys Arg Leu Gly Arg Ala Val Glu Pro Ala Leu  
 210 215 220

&lt;210&gt; 548

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (205)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (212)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (226)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 548

Lys Gly Phe Phe Pro Gln Leu Arg Arg Glu Ala Asn Leu Val Ala Thr  
 1 5 10 15

Cys Leu Pro Val Arg Ala Ser Leu Pro His Arg Leu Asn Met Leu Arg  
 20 25 30

Gly Pro Gly Pro Gly Leu Leu Leu Leu Ala Val Xaa Cys Leu Gly Thr  
 35 40 45

554

Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys Arg Gln Ala Gln Gln  
 50 55 60  
 Met Val Gln Pro Gln Ser Pro Val Ala Val Ser Gln Ser Lys Pro Gly  
 65 70 75 80  
 Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn Gln Gln Trp Glu Arg  
 85 90 95  
 Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys Tyr Gly Gly Ser Arg  
 100 105 110  
 Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu Glu Thr Cys Phe Asp  
 115 120 125  
 Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr Glu Arg Pro  
 130 135 140  
 Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala Gly Arg Gly  
 145 150 155 160  
 Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly Gly Gln Ser  
 165 170 175  
 Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr Gly Gly Tyr  
 180 185 190  
 Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Xaa Trp Thr Cys  
 195 200 205  
 Lys Pro Ile Xaa Glu Lys Cys Leu Ile Met Leu Leu Gly Leu Leu Cys  
 210 215 220  
 Gly Xaa Arg Thr Trp Glu Lys  
 225 230

&lt;210&gt; 549

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 549

Glu Ala Gly Thr Pro Gly Ser Gln Thr Arg Ala Asp Pro Ile Val Lys  
 1 5 10 15  
 Tyr Phe Tyr Ile Phe Ser Phe Pro Gln Lys Arg Ser Leu Thr Tyr Cys  
 20 25 30

555

Phe Ile Asp Ser Leu Ala Val Arg Gly Ser Phe Pro Glu Val Gly Arg  
           35                          40                          45  
 Arg Gly Ser Gly Val Ala Val Ser Cys Leu Pro Ser Gln Val Val Thr  
           50                          55                          60  
 Leu Val Met Asp Cys Leu Ser Pro Ser Phe His Pro Gly Glu Thr Val  
           65                          70                          75                          80  
 Gln Ile

<210> 550  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 550  
 Gly Leu Val Gly Glu Arg Thr Gln Glu Arg Gly Val Gln Glu Ser Arg  
       1                          5                          10                          15  
 Leu Ser Glu Leu Cys Gly Val Cys Gly Trp Gln Gly Gln Pro Leu Gln  
           20                          25                          30  
 Pro Leu Lys Thr Leu Lys Ala Arg Asp Ser Trp Arg Arg Leu Gly Leu  
           35                          40                          45  
 Pro Gly Ser Ser Ser Lys Tyr Pro Gly Ala Ser Glu Leu Pro Gly Cys  
           50                          55                          60  
 Tyr Met Ala Gln Gly Thr Gln Val Gln Gly Arg Thr Gly Lys Thr Arg  
           65                          70                          75                          80  
 Tyr Pro Met Cys Lys Val Lys Thr Leu Gly Ser Leu Leu Asn Asp Glu  
                           85                          90                          95  
 Glu Phe Lys Thr Val Thr Ala Leu Arg His Pro Trp Gly Gln Arg Ser  
           100                          105                          110  
 Ala

<210> 551  
 <211> 305  
 <212> PRT  
 <213> Homo sapiens

556

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (300)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 551

Pro	Ala	Ile	Ala	Met	Ala	Arg	Gly	Lys	Ala	Lys	Glu	Glu	Gly	Ser	Trp	1	5	10	15
Lys	Lys	Phe	Ile	Trp	Asn	Ser	Glu	Lys	Lys	Glu	Phe	Leu	Gly	Arg	Thr	20	25	30	
Gly	Gly	Ser	Trp	Phe	Lys	Ile	Leu	Leu	Phe	Tyr	Val	Ile	Phe	Tyr	Gly	35	40	45	
Cys	Leu	Ala	Gly	Ile	Phe	Ile	Gly	Thr	Ile	Gln	Val	Met	Leu	Leu	Thr	50	55	60	
Ile	Ser	Glu	Phe	Lys	Pro	Thr	Tyr	Gln	Asp	Arg	Val	Ala	Pro	Pro	Gly	65	70	75	80
Leu	Thr	Gln	Ile	Pro	Gln	Ile	Gln	Lys	Thr	Glu	Ile	Ser	Phe	Arg	Pro	85	90	95	
Asn	Asp	Pro	Lys	Ser	Tyr	Glu	Ala	Tyr	Val	Leu	Asn	Ile	Val	Arg	Phe	100	105	110	
Leu	Glu	Lys	Tyr	Lys	Asp	Ser	Ala	Gln	Arg	Asp	Asp	Met	Ile	Phe	Glu	115	120	125	
Asp	Cys	Gly	Asp	Val	Pro	Ser	Glu	Pro	Lys	Glu	Arg	Gly	Asp	Phe	Asn	130	135	140	
His	Glu	Arg	Gly	Glu	Arg	Lys	Val	Cys	Arg	Phe	Lys	Leu	Glu	Trp	Leu	145	150	155	160
Gly	Asn	Cys	Ser	Gly	Leu	Asn	Asp	Glu	Thr	Tyr	Gly	Tyr	Lys	Glu	Gly	165	170	175	
Lys	Pro	Cys	Ile	Ile	Ile	Lys	Leu	Asn	Arg	Val	Leu	Gly	Phe	Lys	Pro	180	185	190	
Lys	Pro	Pro	Lys	Asn	Glu	Ser	Leu	Glu	Thr	Tyr	Pro	Val	Met	Lys	Tyr	195	200	205	
Asn	Pro	Asn	Val	Leu	Pro	Val	Gln	Cys	Thr	Gly	Lys	Arg	Asp	Glu	Asp	210	215	220	
Lys	Asp	Lys	Val	Gly	Asn	Val	Glu	Tyr	Phe	Gly	Leu	Gly	Asn	Ser	Pro	225	230	235	240

557

Gly Phe Pro Leu Gln Tyr Tyr Pro Tyr Tyr Gly Lys Leu Leu Gln Pro  
 245 250 255

Lys Tyr Leu Gln Pro Leu Leu Ala Val Gln Phe Thr Asn Leu Thr Met  
 260 265 270

Asp Thr Glu Ile Arg Ile Glu Cys Lys Ala Tyr Gly Glu Asn Ile Gly  
 275 280 285

Tyr Ser Glu Lys Asp Arg Phe Gln Gly Arg Phe Xaa Val Cys Gly Ser  
 290 295 300

Phe  
 305

<210> 552

<211> 106

<212> PRT

<213> Homo sapiens

<400> 552

Ala Pro Arg Gly Cys Ser Met Pro His Arg Lys Lys Lys Pro Phe Ile  
 1 5 10 15

Glu Lys Lys Lys Ala Val Ser Phe His Leu Val His Arg Ser Gln Arg  
 20 25 30

Asp Pro Leu Ala Ala Asp Glu Ser Ala Pro Gln Arg Val Leu Leu Pro  
 35 40 45

Thr Gln Lys Ile Asp Asn Glu Glu Arg Arg Ala Glu Gln Arg Lys Tyr  
 50 55 60

Gly Val Phe Phe Asp Asp Asp Tyr Asp Tyr Leu Gln His Leu Lys Glu  
 65 70 75 80

Pro Ser Gly Pro Ser Glu Leu Ile Pro Ser Ser Thr Phe Ser Ala His  
 85 90 95

Asn Arg Arg Glu Glu Lys Glu Glu Thr Leu  
 100 105

<210> 553

<211> 235

<212> PRT

<213> Homo sapiens

558

&lt;400&gt; 553

```

His Thr Leu Ser Arg Trp Thr Lys His Ser Ile Pro Arg Trp Asn Asp
 1             5             10             15

Ala Arg Thr Asp Asp Thr Trp His Ser Glu Leu Asp Met Arg Lys Ile
          20             25             30

Gly Gln Ala Arg Asn Thr Leu Met Asp Met Arg Leu Ser Gln Val Ser
          35             40             45

Asp Ser Val Ser Gly Gln Thr Val Val Asp Pro Lys Gly Tyr Leu Thr
          50             55             60

Asp Leu Asn Ser Met Ile Pro Thr His Gly Gly Asp Ile Asn Asp Ile
 65             70             75             80

Lys Lys Ala Arg Leu Leu Leu Lys Ser Val Arg Glu Thr Asn Pro His
          85             90             95

His Pro Pro Ala Trp Ile Ala Ser Ala Arg Leu Glu Glu Val Thr Gly
          100            105            110

Lys Leu Gln Val Ala Arg Asn Leu Ile Met Lys Gly Thr Glu Met Cys
          115            120            125

Pro Lys Ser Glu Asp Val Trp Leu Glu Ala Ala Arg Leu Gln Pro Gly
          130            135            140

Asp Thr Ala Lys Ala Val Val Ala Gln Ala Val Arg His Leu Pro Gln
          145            150            155            160

Ser Val Arg Ile Tyr Ile Arg Ala Ala Glu Leu Glu Thr Asp Ile Arg
          165            170            175

Ala Lys Lys Arg Val Leu Arg Lys Ala Leu Glu His Val Pro Asn Ser
          180            185            190

Val Arg Leu Trp Lys Ala Ala Val Glu Leu Glu Glu Pro Glu Asp Ala
          195            200            205

Arg Ile Met Leu Ser Arg Ala Val Glu Cys Cys Pro Thr Ser Val Glu
          210            215            220

Leu Trp Leu Cys Ser Gly Lys Ala Gly Asp Leu
          225            230            235

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&lt;210&gt; 554

&lt;211&gt; 61

&lt;212&gt; PRT



559

&lt;213&gt; Homo sapiens

&lt;400&gt; 554

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Leu Trp Phe Cys His Asn Ile Arg Ile Tyr Lys His Phe Lys Ser Ile
 1             5             10             15

Leu Phe Phe Cys Phe His Phe Arg Asn Ile His Val Leu Asn Lys Ser
      20             25             30

Cys Val Leu Ile Ser Leu Leu Cys Asn Asn Leu Val Cys Leu Thr Phe
      35             40             45

Leu Thr Phe Ile Ser Asn Ile Cys Phe Ile Ile Glu Gln
      50             55             60

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&lt;210&gt; 555

&lt;211&gt; 684

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (151)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (683)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 555

```

Arg Gly Lys Gly Phe Lys Glu Phe Phe Leu Gly Val Cys Gln Thr Phe
 1             5             10             15

Ile Pro Cys Leu Cys Ala Glu Gly Ile Gln Leu Gln Phe Phe Cys Ser
      20             25             30

Gly Ser Gly Ser Ser Pro Leu Leu Lys Asp Leu Glu Ser Met Lys Thr
      35             40             45

Gly Leu Phe Phe Leu Cys Leu Leu Gly Thr Ala Ala Ala Ile Pro Thr
      50             55             60

Asn Ala Arg Leu Leu Ser Asp His Ser Lys Pro Thr Ala Glu Thr Val
      65             70             75             80

Ala Pro Asp Asn Thr Ala Ile Pro Ser Leu Arg Ala Glu Ala Glu Glu
      85             90             95

```

560

Asn	Glu	Lys	Glu	Thr	Ala	Val	Ser	Thr	Glu	Asp	Asp	Ser	His	His	Lys	100	105	110	
Ala	Glu	Lys	Ser	Ser	Val	Leu	Lys	Ser	Lys	Glu	Glu	Ser	His	Glu	Gln	115	120	125	
Ser	Ala	Glu	Gln	Gly	Lys	Ser	Ser	Ser	Gln	Glu	Leu	Gly	Leu	Lys	Asp	130	135	140	
Gln	Glu	Asp	Ser	Asp	Gly	Xaa	Leu	Ser	Val	Asn	Leu	Glu	Tyr	Ala	Pro	145	150	155	160
Thr	Glu	Gly	Thr	Leu	Asp	Ile	Lys	Glu	Asp	Met	Ser	Glu	Pro	Gln	Glu	165	170	175	
Lys	Lys	Leu	Ser	Glu	Asn	Thr	Asp	Phe	Leu	Ala	Pro	Gly	Val	Ser	Ser	180	185	190	
Phe	Thr	Asp	Ser	Asn	Gln	Gln	Glu	Ser	Ile	Thr	Lys	Arg	Glu	Glu	Asn	195	200	205	
Gln	Glu	Gln	Pro	Arg	Asn	Tyr	Ser	His	His	Gln	Leu	Asn	Arg	Ser	Ser	210	215	220	
Lys	His	Ser	Gln	Gly	Leu	Arg	Asp	Gln	Gly	Asn	Gln	Glu	Gln	Asp	Pro	225	230	235	240
Asn	Ile	Ser	Asn	Gly	Glu	Glu	Glu	Glu	Glu	Lys	Glu	Pro	Gly	Glu	Val	245	250	255	
Gly	Thr	His	Asn	Asp	Asn	Gln	Glu	Arg	Lys	Thr	Glu	Leu	Pro	Arg	Glu	260	265	270	
His	Ala	Asn	Ser	Lys	Gln	Glu	Glu	Asp	Asn	Thr	Gln	Ser	Asp	Asp	Ile	275	280	285	
Leu	Glu	Glu	Ser	Asp	Gln	Pro	Thr	Gln	Val	Ser	Lys	Met	Gln	Glu	Asp	290	295	300	
Glu	Phe	Asp	Gln	Gly	Asn	Gln	Glu	Gln	Glu	Asp	Asn	Ser	Asn	Ala	Glu	305	310	315	320
Met	Glu	Glu	Glu	Asn	Ala	Ser	Asn	Val	Asn	Lys	His	Ile	Gln	Glu	Thr	325	330	335	
Glu	Trp	Gln	Ser	Gln	Glu	Gly	Lys	Thr	Gly	Leu	Glu	Ala	Ile	Ser	Asn	340	345	350	
His	Lys	Glu	Thr	Glu	Glu	Lys	Thr	Val	Ser	Glu	Ala	Leu	Leu	Met	Glu	355	360	365	

561

Pro Thr Asp Asp Gly Asn Thr Thr Pro Arg Asn His Gly Val Asp Asp  
 370 375 380

Asp Gly Asp Asp Asp Gly Asp Asp Gly Gly Thr Asp Gly Pro Arg His  
 385 390 395 400

Ser Ala Ser Asp Asp Tyr Phe Ile Pro Ser Gln Ala Phe Leu Glu Ala  
 405 410 415

Glu Arg Ala Gln Ser Ile Ala Tyr His Leu Lys Ile Glu Glu Gln Arg  
 420 425 430

Glu Lys Val His Glu Asn Glu Asn Ile Gly Thr Thr Glu Pro Gly Glu  
 435 440 445

His Gln Glu Ala Lys Lys Ala Glu Asn Ser Ser Asn Glu Glu Glu Thr  
 450 455 460

Ser Ser Glu Gly Asn Met Arg Val His Ala Val Asp Ser Cys Met Ser  
 465 470 475 480

Phe Gln Cys Lys Arg Gly His Ile Cys Lys Ala Asp Gln Gln Gly Lys  
 485 490 495

Pro His Cys Val Cys Gln Asp Pro Val Thr Cys Pro Pro Thr Lys Pro  
 500 505 510

Leu Asp Gln Val Cys Gly Thr Asp Asn Gln Thr Tyr Ala Ser Ser Cys  
 515 520 525

His Leu Phe Ala Thr Lys Cys Arg Leu Glu Gly Thr Lys Lys Gly His  
 530 535 540

Gln Leu Gln Leu Asp Tyr Phe Gly Ala Cys Lys Ser Ile Pro Thr Cys  
 545 550 555 560

Thr Asp Phe Glu Val Ile Gln Phe Pro Leu Arg Met Arg Asp Trp Leu  
 565 570 575

Lys Asn Ile Leu Met Gln Leu Tyr Glu Ala Asn Ser Glu His Ala Gly  
 580 585 590

Tyr Leu Asn Glu Lys Gln Arg Asn Lys Val Lys Lys Ile Tyr Leu Asp  
 595 600 605

Glu Lys Arg Leu Leu Ala Gly Asp His Pro Ile Asp Leu Leu Leu Arg  
 610 615 620

Asp Phe Lys Lys Asn Tyr His Met Tyr Val Tyr Pro Val His Trp Gln  
 625 630 635 640

562

Phe Ser Glu Leu Asp Gln His Pro Met Asp Arg Val Leu Thr His Ser  
                     645                    650                    655

Glu Leu Ala Pro Leu Arg Ala Ser Leu Val Pro Met Glu His Cys Ile  
                     660                    665                    670

Thr Arg Phe Phe Glu Glu Cys Asp Pro Asn Xaa Gly  
                     675                    680

&lt;210&gt; 556

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 556

Leu Val Leu Ile Leu Leu Ala Gly Ile Asn Asn Pro Lys Ser Val Gln  
   1                    5                    10                    15

Thr Leu Gly Ala Lys Cys Ser Thr Gln Phe Gly Ile Leu Cys Leu Lys  
                     20                    25                    30

Ile Tyr Phe Ile Val Thr Ala Pro Cys Ile Tyr Ser Trp Pro Arg Thr  
                     35                    40                    45

Glu Leu Leu Gln Val Thr Trp Asn Phe His Ser Lys Ser  
                     50                    55                    60

&lt;210&gt; 557

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (115)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (117)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (124)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (130)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (137)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (142)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 557

Glu	Ile	Ala	Asn	Met	Pro	Asn	Ser	Glu	Pro	Ala	Ser	Leu	Leu	Glu	Leu
1				5					10					15	

Phe	Asn	Ser	Ile	Ala	Thr	Gln	Gly	Glu	Leu	Val	Arg	Ser	Leu	Lys	Ala
			20					25					30		

Gly	Asn	Ala	Ser	Lys	Asp	Glu	Ile	Asp	Ser	Ala	Val	Lys	Met	Leu	Val
		35					40					45			

Ser	Leu	Lys	Met	Ser	Tyr	Lys	Ala	Ala	Ala	Gly	Glu	Asp	Tyr	Lys	Ala
	50					55					60				

Asp	Cys	Pro	Pro	Gly	Asn	Pro	Ala	Pro	Thr	Ser	Asn	His	Gly	Pro	Asp
65					70					75				80	

Ala	Thr	Glu	Ala	Glu	Glu	Asp	Phe	Val	Asp	Pro	Trp	Thr	Val	Gln	Thr
				85					90					95	

Ser	Ser	Ala	Lys	Gly	Ile	Asp	Tyr	Asp	Lys	Leu	Ile	Val	Arg	Phe	Gly
			100					105					110		

Ser	Ser	Xaa	Asn	Xaa	Gln	Glu	Leu	Leu	Xaa	Asp	Xaa	Glu	Ser	Thr	Ala
		115					120					125			

Lys	Xaa	Thr	His	Ser	Gly	Gln	Gly	Xaa	Phe	Phe	Lys	Arg	Xaa		
	130					135						140			

&lt;210&gt; 558

564

&lt;211&gt; 475

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 558

Glu Ile Ala Asn Met Pro Asn Ser Glu Pro Ala Ser Leu Leu Glu Leu  
 1 5 10 15

Phe Asn Ser Ile Ala Thr Gln Gly Glu Leu Val Arg Ser Leu Lys Ala  
 20 25 30

Gly Asn Ala Ser Lys Asp Glu Ile Asp Ser Ala Val Lys Met Leu Val  
 35 40 45

Ser Leu Lys Met Ser Tyr Lys Ala Ala Ala Gly Glu Asp Tyr Lys Ala  
 50 55 60

Asp Cys Pro Pro Gly Asn Pro Ala Pro Thr Ser Asn His Gly Pro Asp  
 65 70 75 80

Ala Thr Glu Ala Glu Glu Asp Phe Val Asp Pro Trp Thr Val Gln Thr  
 85 90 95

Ser Ser Ala Lys Gly Ile Asp Tyr Asp Lys Leu Ile Val Arg Phe Gly  
 100 105 110

Ser Ser Lys Ile Asp Lys Glu Leu Ile Asn Arg Ile Glu Arg Ala Thr  
 115 120 125

Gly Gln Arg Pro His His Phe Leu Arg Arg Gly Ile Phe Phe Ser His  
 130 135 140

Arg Asp Met Asn Gln Val Leu Asp Ala Tyr Glu Asn Lys Lys Pro Phe  
 145 150 155 160

Tyr Leu Tyr Thr Gly Arg Gly Pro Ser Ser Glu Ala Met His Val Gly  
 165 170 175

His Leu Ile Pro Phe Ile Phe Thr Lys Trp Leu Gln Asp Val Phe Asn  
 180 185 190

Val Pro Leu Val Ile Gln Met Thr Asp Asp Glu Lys Tyr Leu Trp Lys  
 195 200 205

Asp Leu Thr Leu Asp Gln Ala Tyr Ser Tyr Ala Val Glu Asn Ala Lys  
 210 215 220

Asp Ile Ile Ala Cys Gly Phe Asp Ile Asn Lys Thr Phe Ile Phe Ser  
 225 230 235 240

Asp Leu Asp Tyr Met Gly Met Ser Ser Gly Phe Tyr Lys Asn Val Val

565

245							250							255						
Lys	Ile	Gln	Lys	His	Val	Thr	Phe	Asn	Gln	Val	Lys	Gly	Ile	Phe	Gly					
			260							265		270								
Phe	Thr	Asp	Ser	Asp	Cys	Ile	Gly	Lys	Ile	Ser	Phe	Pro	Ala	Ile	Gln					
			275									285								
Ala	Ala	Pro	Ser	Phe	Ser	Asn	Ser	Phe	Pro	Gln	Ile	Phe	Arg	Asp	Arg					
			290		295					300										
Thr	Asp	Ile	Gln	Cys	Leu	Ile	Pro	Cys	Ala	Ile	Asp	Gln	Asp	Pro	Tyr					
305		310					315							320						
Phe	Arg	Met	Thr	Arg	Asp	Val	Ala	Pro	Arg	Ile	Gly	Tyr	Pro	Lys	Pro					
				325		330					335									
Ala	Leu	Leu	His	Ser	Thr	Phe	Phe	Pro	Ala	Leu	Gln	Gly	Ala	Gln	Thr					
			340		345					350										
Lys	Met	Ser	Ala	Ser	Asp	Pro	Asn	Ser	Ser	Ile	Phe	Leu	Thr	Asp	Thr					
			355		360					365										
Ala	Lys	Gln	Ile	Lys	Thr	Lys	Val	Asn	Lys	His	Ala	Phe	Ser	Gly	Gly					
			370		375					380										
Arg	Asp	Thr	Ile	Glu	Glu	His	Arg	Gln	Phe	Gly	Gly	Asn	Cys	Asp	Val					
385		390					395							400						
Asp	Val	Ser	Phe	Met	Tyr	Leu	Thr	Phe	Phe	Leu	Glu	Asp	Asp	Asp	Lys					
				405		410					415									
Leu	Glu	Gln	Ile	Arg	Lys	Asp	Tyr	Thr	Ser	Gly	Ala	Met	Leu	Thr	Gly					
			420		425					430										
Glu	Leu	Lys	Lys	Ala	Leu	Ile	Glu	Val	Leu	Gln	Pro	Leu	Ile	Ala	Glu					
			435		440					445										
His	Gln	Ala	Arg	Arg	Lys	Glu	Val	Thr	Asp	Glu	Ile	Val	Lys	Glu	Phe					
			450		455					460										
Met	Thr	Pro	Arg	Lys	Leu	Ser	Phe	Asp	Phe	Gln										
465		470					475													

<213> Homo sapiens

566

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 559

Trp	Ile	Pro	Xaa	Leu	Gln	Ile	Arg	Thr	Gly	Glu	Ser	Tyr	Cys	Cys	Gly
1				5					10					15	
Leu	Arg	Gly	Arg	Arg	Pro	Cys	Arg	Ser	Thr	Ser	Thr	Ser	Ala	Gly	Lys
			20					25					30		
Leu	Arg	Arg	Arg	Thr	Ala	Pro	Arg	Gly	Ser	Arg	Glu	Ala	His	Gly	Val
		35					40					45			
Gln	Ala	Leu	Arg	Gly	Gly	Trp	Pro	Gly	Gly	Tyr	Val	Ser	Phe	Gly	Pro
	50					55					60				
His	Ala	Gly	Lys	Leu	Val	Ala	Ile	Val	Asp	Val	Ile	Asp	Gln	Asn	Arg
65					70					75					80
Ala	Leu	Val	Asp	Gly	Pro	Cys	Thr	Gln	Val	Arg	Arg	Gln	Ala	Met	Pro
			85						90					95	
Phe	Lys	Cys	Met	Gln	Leu	Thr	Asp	Phe	Ile	Leu	Lys	Phe	Pro	His	Ser
		100					105						110		
Ala	His	Gln	Lys	Tyr	Val	Arg	Gln	Ala	Trp	Gln	Lys	Ala	Asp	Ile	Asn
	115						120					125			
Thr	Lys	Trp	Ala	Ala	Thr	Arg	Trp	Ala	Lys	Lys	Ile	Glu	Ala	Arg	Glu
	130					135					140				
Arg	Lys	Ala	Lys	Met	Thr	Asp	Phe	Asp	Arg	Phe	Lys	Val	Met	Lys	Ala
145				150					155					160	
Lys	Lys	Met	Arg	Asn	Arg	Ile	Ile	Lys	Asn	Glu	Val	Lys	Lys	Leu	Gln
			165					170						175	
Lys	Ala	Ala	Leu	Leu	Lys	Ala	Ser	Pro	Lys	Lys	Ala	Pro	Gly	Thr	Lys
		180						185					190		
Gly	Thr	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala
	195					200						205			
Ala	Lys	Val	Pro	Ala	Lys	Lys	Ile	Thr	Ala	Ala	Ser	Lys	Lys	Ala	Pro
	210					215					220				
Ala	Gln	Lys	Val	Pro	Ala	Gln	Lys	Ala	Thr	Gly	Gln	Lys	Ala	Ala	Pro
225					230					235					240



567

Ala Pro Lys Ala Gln Lys Gly Gln Lys Ala Pro Ala Gln Lys Ala Pro  
245 250 255

Ala Pro Lys Ala Ser Gly Lys Lys Ala  
260 265

<210> 560  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 560  
Pro Asn Leu Ile Pro Val Ser Arg Asp Trp Glu Gly Arg Ala Ala Ala  
1 5 10 15

Gly Gly Gln Ala Gly Ser Ala Cys Glu Gly Glu Glu Leu Trp Thr Ser  
20 25 30

Ala Ser Leu Pro Arg Glu Arg Val Arg  
35 40

<210> 561  
<211> 48  
<212> PRT  
<213> Homo sapiens

<400> 561  
Lys His Lys Asn Lys Asn Ile Ser Asp Asn Asn Ile Glu Lys Thr Lys  
1 5 10 15

Ile His Gly Leu Glu Phe His Pro Arg Asp Cys Ile Leu Lys Asp Thr  
20 25 30

Gly Phe Ser Ser Phe Phe Phe Phe Phe Ser Phe His Val Ser Val Leu  
35 40 45

<210> 562  
<211> 168  
<212> PRT  
<213> Homo sapiens

<400> 562

568

Glu Pro Trp Pro Ser Pro Lys Lys Ala Arg Ser Gly Arg Trp Leu Arg  
 1 5 10 15  
 Asn Gly Phe Lys Arg Lys Met Glu Glu Pro Glu Glu Pro Ala Asp Ser  
 20 25 30  
 Gly Gln Ser Leu Val Pro Val Tyr Ile Tyr Ser Pro Glu Tyr Val Ser  
 35 40 45  
 Met Cys Asp Ser Leu Ala Lys Ile Pro Lys Arg Ala Ser Met Val His  
 50 55 60  
 Ser Leu Ile Glu Ala Tyr Ala Leu His Lys Gln Met Arg Ile Val Lys  
 65 70 75 80  
 Pro Lys Val Ala Ser Met Glu Glu Met Ala Thr Phe His Thr Asp Ala  
 85 90 95  
 Tyr Leu Gln His Leu Gln Lys Val Ser Gln Glu Gly Asp Asp Asp His  
 100 105 110  
 Pro Asp Ser Ile Glu Tyr Gly Leu Gly Tyr Asp Cys Pro Ala Thr Glu  
 115 120 125  
 Gly Ile Phe Asp Tyr Ala Ala Ala Ile Gly Gly Ala Thr Ile Thr Ala  
 130 135 140  
 Ala Gln Cys Leu Ile Asp Gly Met Cys Lys Val Ala Ile Asn Trp Ser  
 145 150 155 160  
 Gly Arg Trp His His Ala Lys Lys  
 165

&lt;210&gt; 563

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 563

Gly Ser Phe Gln Arg Cys Lys Lys Gly Gln Arg Leu Phe Pro Met Ala  
 1 5 10 15  
 Glu Gly Asn His Arg Lys Lys Pro Leu Lys Val Leu Glu Ser Leu Gly  
 20 25 30  
 Lys Asp Phe Leu Thr Gly Val Leu Asp Asn Leu Val Glu Gln Asn Val  
 35 40 45  
 Leu Asn Trp Lys Glu Glu Glu Lys Lys Lys Tyr Tyr Asp Ala Lys Thr

50		55		60	
Glu Asp Lys Val Arg Val Met Ala Asp Ser Met Gln Glu Lys Gln Arg					
65		70		75	80
Met Ala Gly Gln Met Leu Leu Gln Thr Phe Phe Asn Ile Asp Gln Ile					
	85		90		95
Ser Pro Asn Lys Lys Ala His Pro Asn Met Glu Ala Gly Pro Pro Glu					
	100		105		110
Ser Gly Glu Ser Thr Asp Ala Leu Lys Leu Cys Pro His Glu Glu Phe					
	115		120		125
Leu Arg Leu Cys Lys Glu Arg Ala Glu Glu Ile Tyr Pro Ile Lys Glu					
	130		135		140
Arg Asn Asn Arg Thr Arg Leu Ala Leu Ile Ile Cys Asn Thr Glu Phe					
145		150		155	160
Asp His Leu Pro Pro Arg Asn Gly Ala Asp Phe Asp Ile Thr Gly Met					
	165		170		175
Lys Glu Leu Leu Glu Gly Leu Asp Tyr Ser Val Asp Val Glu Glu Asn					
	180		185		190
Leu Thr Ala Arg Asp Met Glu Ser Ala Leu Arg Ala Phe Ala Thr Arg					
	195		200		205
Pro Glu His Lys Ser Ser Asp Ser Thr Phe Leu Val Leu Met Ser His					
	210		215		220
Gly Ile Leu Glu Gly Ile Cys Gly Thr Val His Asp Glu Lys Lys Pro					
225		230		235	240
Asp Val Leu Leu Tyr Asp Thr Ile Phe Gln Ile Phe Asn Asn Arg Asn					
	245		250		255
Cys Leu Ser Leu Lys Asp Lys Pro Lys Val Ile Ile Val Gln Ala Cys					
	260		265		270
Arg Gly Ala Asn Arg Gly Glu Leu Trp Val Arg Asp Ser Pro Ala Ser					
	275		280		285
Leu Glu Val Ala Ser Ser Gln Ser Ser Glu Asn Leu Glu Glu Asp Ala					
	290		295		300
Val Tyr Lys Thr His Val Glu Lys Asp Phe Ile Ala Phe Cys Ser Ser					
305		310		315	320
Thr Pro His Asn Val Pro Gly Glu Thr Ala Gln Trp Ala Leu Ser Ser					

570

				325						330						335			
Ser	His	Asn	Ser	Ser	His	Ala	Ser	Arg	Asn	Ile	Leu	Gly	Ala	Ala	Thr				
			340					345					350						

&lt;210&gt; 564

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 564

Arg	Phe	Tyr	Arg	Ser	Arg	Lys	Lys	His	Leu	Ile	Thr	Thr	Gln	Thr	Glu				
1				5					10						15				

His	Lys	Cys	Val	Leu	Asp	Ser	Cys	Arg	Ser	Leu	Glu	Ala	Glu	Gly	Phe				
			20					25						30					

Gln	Val	Thr	Tyr	Leu	Pro	Val	Gln	Lys	Ser	Gly	Ile	Ile	Asp	Leu	Lys				
		35					40						45						

Glu	Leu	Glu	Ala	Ala	Ile	Gln	Pro	Asp	Thr	Ser	Leu	Val	Ser	Val	Met				
	50					55					60								

Thr	Val	Asn	Asn	Glu	Ile	Gly	Val	Lys	Gln	Pro	Ile	Ala	Glu	Ile	Gly				
65					70				75						80				

Arg	Ile	Cys	Ser	Ser	Arg	Lys	Val	Tyr	Phe	His	Thr	Asp	Ala	Ala	Gln				
				85					90						95				

Ala	Val	Gly	Lys	Ile	Pro	Leu	Asp	Val	Asn	Asp	Met	Lys	Ile	Asp	Leu				
			100					105					110						

Met	Ser	Ile	Ser	Gly	His	Lys	Ile	Tyr	Gly	Pro	Lys	Gly	Val	Gly	Ala				
	115						120					125							

Ile	Tyr	Ile	Arg	Arg	Arg	Pro	Arg	Val	Arg	Val	Glu	Ala	Leu	Gln	Ser				
	130					135					140								

Gly	Gly	Gly	Gln	Glu	Arg	Gly	Met	Arg	Ser	Gly	Thr	Val	Pro	Thr	Pro				
145					150					155					160				

Leu	Val	Val	Gly	Leu	Gly	Ala	Ala	Cys	Glu	Val	Ala	Gln	Gln	Glu	Met				
			165						170					175					

Glu	Tyr	Asp	His	Lys	Arg	Ile	Ser	Lys	Leu	Ser	Glu	Arg	Leu	Ile	Gln				
			180					185						190					

571

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Asn Ile Met Lys Ser Leu Pro Asp Val Val Met Asn Gly Asp Pro Lys
      195                      200                      205

His His Tyr Pro Gly Cys Ile Asn Leu Ser Phe Ala Tyr Val Glu Gly
      210                      215                      220

Glu Ser Leu Leu Met Ala Leu Lys Asp Val Ala Leu Ser Ser Gly Ser
225                      230                      235                      240

Ala Cys Thr Ser Ala Ser Leu Glu Pro Ser Tyr Val Leu Arg Ala Ile
      245                      250                      255

Gly Thr Asp Glu Asp Leu Ala His Ser Ser Ile Arg Phe Gly Ile Gly
      260                      265                      270

Arg Phe Thr Thr Glu Glu Glu Val Asp Tyr Thr Val Glu Lys Cys Ile
      275                      280                      285

Gln His Val Lys Arg Leu Arg Glu Met Ser Pro Leu Trp Glu Met Val
      290                      295                      300

Gln Asp Gly Ile Asp Leu Lys Ser Ile Lys Trp Thr Gln His
305                      310                      315

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&lt;210&gt; 565

&lt;211&gt; 418

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (367)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (383)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 565

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Glu Ser Thr Glu Ser Leu Thr Xaa Glu Gly Thr Asp Met Asn Glu Gly
  1                      5                      10                      15

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Gln	Leu	Leu	Gly	Asp	Phe	Glu	Ile	Glu	Ser	Lys	Gln	Leu	Glu	Ala	Glu	20	25	30
Ser	Trp	Ser	Arg	Ile	Ile	Asp	Ser	Lys	Phe	Leu	Lys	Gln	Gln	Lys	Lys	35	40	45
Asp	Val	Val	Lys	Arg	Gln	Glu	Val	Ile	Tyr	Glu	Leu	Met	Gln	Thr	Glu	50	55	60
Phe	His	His	Val	Arg	Thr	Leu	Lys	Ile	Met	Ser	Gly	Val	Tyr	Ser	Gln	65	70	75
Gly	Met	Met	Ala	Asp	Leu	Leu	Phe	Glu	Gln	Gln	Met	Val	Glu	Lys	Leu	85	90	95
Phe	Pro	Cys	Leu	Asp	Glu	Leu	Ile	Ser	Ile	His	Ser	Gln	Phe	Phe	Gln	100	105	110
Arg	Ile	Leu	Glu	Arg	Lys	Lys	Glu	Ser	Leu	Val	Asp	Lys	Ser	Glu	Lys	115	120	125
Asn	Phe	Leu	Ile	Lys	Arg	Ile	Gly	Asp	Val	Leu	Val	Asn	Gln	Phe	Ser	130	135	140
Gly	Glu	Asn	Ala	Glu	Arg	Leu	Lys	Lys	Thr	Tyr	Gly	Lys	Phe	Cys	Gly	145	150	155
Gln	His	Asn	Gln	Ser	Val	Asn	Tyr	Phe	Lys	Asp	Leu	Tyr	Ala	Lys	Asp	165	170	175
Lys	Arg	Phe	Gln	Ala	Phe	Val	Lys	Lys	Lys	Met	Ser	Ser	Ser	Val	Val	180	185	190
Arg	Arg	Leu	Gly	Ile	Pro	Glu	Cys	Ile	Leu	Leu	Val	Thr	Gln	Arg	Ile	195	200	205
Thr	Lys	Tyr	Pro	Val	Leu	Phe	Gln	Arg	Ile	Leu	Gln	Cys	Thr	Lys	Asp	210	215	220
Asn	Glu	Val	Glu	Gln	Glu	Asp	Leu	Ala	Gln	Ser	Leu	Ser	Leu	Val	Lys	225	230	235
Asp	Val	Ile	Gly	Ala	Val	Asp	Ser	Lys	Val	Ala	Ser	Tyr	Glu	Lys	Lys	245	250	255
Val	Arg	Leu	Asn	Glu	Ile	Tyr	Thr	Lys	Thr	Asp	Ser	Lys	Ser	Ile	Met	260	265	270
Arg	Met	Lys	Ser	Gly	Gln	Met	Phe	Ala	Lys	Glu	Asp	Leu	Lys	Arg	Lys	275	280	285

573

Lys Leu Val Arg Asp Gly Ser Val Phe Leu Lys Asn Ala Ala Gly Arg  
 290 295 300  
 Leu Lys Glu Val Gln Ala Val Leu Leu Thr Asp Ile Leu Val Phe Leu  
 305 310 315 320  
 Gln Glu Lys Asp Gln Lys Tyr Ile Phe Ala Ser Leu Asp Gln Lys Ser  
 325 330 335  
 Thr Val Ile Ser Leu Lys Lys Leu Ile Val Arg Glu Val Ala His Glu  
 340 345 350  
 Glu Lys Gly Leu Phe Leu Ile Ser Met Gly Met Thr Asp Pro Xaa Met  
 355 360 365  
 Val Glu Val His Ala Ser Ser Lys Glu Glu Arg Asn Ser Trp Xaa Gln  
 370 375 380  
 Ile Ile Gln Asp Thr Ile Asn Thr Arg Thr Glu Met Lys Met Lys Glu  
 385 390 395 400  
 Phe Leu Val Arg Met Arg Lys Lys Arg Lys Cys Trp Thr Pro Glu Pro  
 405 410 415  
 Glu Asn

&lt;210&gt; 566

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 566

Pro Gln Cys Leu Gln Lys His Phe Ala Lys Ile Arg Asp Arg Ser Thr  
 1 5 10 15  
 Ser Gly Gly Lys Met Lys Val Asn Gly Ala Pro Arg Glu Asp Ala Arg  
 20 25 30  
 Pro Val Pro Gln Gly Ser Cys Gln Ser Glu Leu His Arg Ala Leu Glu  
 35 40 45  
 Arg Leu Ala Xaa Ser Gln Ser Arg Thr His Glu Asp Leu Tyr Ile Ile  
 50 55 60

574

Pro Ile Pro Asn Cys Asp Arg Asn Gly Asn Phe His Pro Lys Gln Cys  
 65 70 75 80

His Pro Ala Leu Asp Gly Gln Arg Gly Lys Cys Trp Cys Val Asp Arg  
 85 90 95

Lys Thr Gly Val Lys Leu Pro Gly Gly Leu Glu Pro Lys Gly Glu Leu  
 100 105 110

Asp Cys His Gln Leu Ala Asp Ser Phe Arg Glu  
 115 120

&lt;210&gt; 567

&lt;211&gt; 305

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (162)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (214)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (266)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 567

Gly Ser Leu Leu Met Lys Ile Glu Leu Ser Met Gln Pro Trp Asn Pro  
 1 5 10 15

Gly Tyr Ser Ser Glu Gly Ala Thr Ala Gln Glu Thr Tyr Thr Cys Pro  
 20 25 30

Lys Met Ile Glu Met Glu Gln Ala Glu Ala Gln Leu Ala Glu Leu Asp  
 35 40 45

Leu Leu Ala Ser Met Phe Pro Gly Glu Asn Glu Leu Ile Val Asn Asp  
 50 55 60

Gln Leu Ala Val Ala Glu Leu Lys Asp Cys Ile Glu Lys Lys Thr Met  
 65 70 75 80



575

Glu Gly Arg Ser Ser Lys Val Tyr Phe Thr Ile Asn Met Asn Leu Asp  
                             85                            90                            95  
 Val Ser Asp Glu Lys Met Ala Met Phe Ser Leu Ala Cys Ile Leu Pro  
                             100                            105                            110  
 Phe Lys Tyr Pro Ala Val Leu Pro Glu Ile Thr Val Arg Ser Val Leu  
                             115                            120                            125  
 Leu Ser Arg Ser Gln Gln Thr Gln Leu Asn Thr Asp Leu Thr Ala Phe  
                             130                            135                            140  
 Leu Gln Lys His Cys His Gly Asp Val Cys Ile Leu Asn Ala Thr Glu  
 145                            150                            155                            160  
 Trp Xaa Arg Glu His Ala Ser Gly Tyr Val Ser Arg Asp Thr Ser Ser  
                             165                            170                            175  
 Ser Pro Thr Thr Gly Ser Thr Val Gln Ser Val Asp Leu Ile Phe Thr  
                             180                            185                            190  
 Arg Leu Trp Ile Tyr Ser His His Ile Tyr Asn Lys Cys Lys Arg Lys  
                             195                            200                            205  
 Asn Ile Leu Glu Trp Xaa Lys Glu Leu Ser Leu Ser Gly Phe Ser Met  
                             210                            215                            220  
 Pro Gly Lys Pro Gly Val Val Cys Val Glu Gly Pro Gln Ser Ala Cys  
 225                            230                            235                            240  
 Glu Glu Phe Trp Ser Arg Leu Arg Lys Leu Asn Ser Glu Glu Asn Phe  
                             245                            250                            255  
 Asn Ser Pro Ser Glu Lys Thr Phe Leu Xaa Met Val Gln Met Met Lys  
                             260                            265                            270  
 Arg Lys Asp Lys Gly Asn Phe Pro Phe Leu Lys Lys Lys Cys Ser Val  
                             275                            280                            285  
 Leu Met Glu Pro Gly Glu Thr Thr Trp Thr Leu Val Ser Ser Ile Ser  
                             290                            295                            300  
 Ser  
 305

&lt;210&gt; 568

&lt;211&gt; 596

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

576

&lt;400&gt; 568

Gln	Glu	Arg	Asp	Gly	Ala	Lys	Met	Ala	Ala	Ala	Asp	Gly	Asp	Asp	Ser	1	5	10	15
Leu	Tyr	Pro	Ile	Ala	Val	Leu	Ile	Asp	Glu	Leu	Arg	Asn	Glu	Asp	Val	20	25	30	
Gln	Leu	Arg	Leu	Asn	Ser	Ile	Lys	Lys	Leu	Ser	Thr	Ile	Ala	Leu	Ala	35	40	45	
Leu	Gly	Val	Glu	Arg	Thr	Arg	Ser	Glu	Leu	Leu	Pro	Phe	Leu	Thr	Asp	50	55	60	
Thr	Ile	Tyr	Asp	Glu	Asp	Glu	Val	Leu	Leu	Ala	Leu	Ala	Glu	Gln	Leu	65	70	75	80
Gly	Thr	Phe	Thr	Thr	Leu	Val	Gly	Gly	Pro	Glu	Tyr	Val	His	Cys	Leu	85	90	95	
Leu	Pro	Pro	Leu	Glu	Ser	Leu	Ala	Thr	Val	Glu	Glu	Thr	Val	Val	Arg	100	105	110	
Asp	Lys	Ala	Val	Glu	Ser	Leu	Arg	Ala	Ile	Ser	His	Glu	His	Ser	Pro	115	120	125	
Ser	Asp	Leu	Glu	Ala	His	Phe	Val	Pro	Leu	Val	Lys	Arg	Leu	Ala	Gly	130	135	140	
Gly	Asp	Trp	Phe	Thr	Ser	Arg	Thr	Ser	Ala	Cys	Gly	Leu	Phe	Ser	Val	145	150	155	160
Cys	Tyr	Pro	Arg	Val	Ser	Ser	Ala	Val	Lys	Ala	Glu	Leu	Arg	Gln	Tyr	165	170	175	
Phe	Arg	Asn	Leu	Cys	Ser	Asp	Asp	Thr	Pro	Met	Val	Arg	Arg	Ala	Ala	180	185	190	
Ala	Ser	Lys	Leu	Gly	Glu	Phe	Ala	Lys	Val	Leu	Glu	Leu	Asp	Asn	Val	195	200	205	
Lys	Ser	Glu	Ile	Ile	Pro	Met	Phe	Ser	Asn	Leu	Ala	Ser	Asp	Glu	Gln	210	215	220	
Asp	Ser	Val	Arg	Leu	Leu	Ala	Val	Glu	Ala	Cys	Val	Asn	Ile	Ala	Gln	225	230	235	240
Leu	Leu	Pro	Gln	Glu	Asp	Leu	Glu	Ala	Leu	Val	Met	Pro	Thr	Leu	Arg	245	250	255	
Gln	Ala	Ala	Glu	Asp	Lys	Ser	Trp	Arg	Val	Arg	Tyr	Met	Val	Ala	Asp				

577

260	265	270
Lys Phe Thr Glu Leu Gln Lys Ala Val Gly Pro Glu Ile Thr Lys Thr		
275	280	285
Asp Leu Val Pro Ala Phe Gln Asn Leu Met Lys Asp Cys Glu Ala Glu		
290	295	300
Val Arg Ala Ala Ala Ser His Lys Val Lys Glu Phe Cys Glu Asn Leu		
305	310	315 320
Ser Ala Asp Cys Arg Glu Asn Val Ile Met Ser Gln Ile Leu Pro Cys		
325	330	335
Ile Lys Glu Leu Val Ser Asp Ala Asn Gln His Val Lys Ser Ala Leu		
340	345	350
Ala Ser Val Ile Met Gly Leu Ser Pro Ile Leu Gly Lys Asp Asn Thr		
355	360	365
Ile Glu His Leu Leu Pro Leu Phe Leu Ala Gln Leu Lys Asp Glu Cys		
370	375	380
Pro Glu Val Arg Leu Asn Ile Ile Ser Asn Leu Asp Cys Val Asn Glu		
385	390	395 400
Val Ile Gly Ile Arg Gln Leu Ser Gln Ser Leu Leu Pro Ala Ile Val		
405	410	415
Glu Leu Ala Glu Asp Ala Lys Trp Arg Val Arg Leu Ala Ile Ile Glu		
420	425	430
Tyr Met Pro Leu Leu Ala Gly Gln Leu Gly Val Glu Phe Phe Asp Glu		
435	440	445
Lys Leu Asn Ser Leu Cys Met Ala Trp Leu Val Asp His Val Tyr Ala		
450	455	460
Ile Arg Glu Ala Ala Thr Ser Asn Leu Lys Lys Leu Val Glu Lys Phe		
465	470	475 480
Gly Lys Glu Trp Ala His Ala Thr Ile Ile Pro Lys Val Leu Ala Met		
485	490	495
Ser Gly Asp Pro Asn Tyr Leu His Arg Met Thr Thr Leu Phe Cys Ile		
500	505	510
Asn Val Leu Ser Glu Val Cys Gly Gln Asp Ile Thr Thr Lys His Met		
515	520	525
Leu Pro Thr Val Leu Arg Met Ala Gly Asp Pro Val Ala Asn Val Arg		

578

530                      535                      540  
 Phe Asn Val Ala Lys Ser Leu Gln Lys Ile Gly Pro Ile Leu Asp Asn  
 545                      550                      555                      560  
 Ser Thr Leu Gln Ser Glu Val Lys Pro Ile Leu Glu Lys Leu Thr Gln  
                     565                      570                      575  
 Asp Gln Asp Val Asp Val Lys Tyr Phe Ala Gln Glu Ala Leu Thr Val  
                     580                      585                      590  
 Leu Ser Leu Ala  
                     595

<210> 569  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 569  
 Ser Thr Val Trp Thr Arg Asn Val Pro Cys His His Ala Met Lys Tyr  
   1                      5                      10                      15  
 Cys Tyr Arg Phe Asn Ile Ala His Leu Cys Arg Met Asn Ser Gly Gly  
                     20                      25                      30  
 Leu Pro Gln Val Thr Val Arg Thr Val Asp Gly Glu Ile Ala Asp Ala  
                     35                      40                      45  
 Leu Leu Ser Arg Phe Ser Val Thr Phe Ser Met Phe Ile Thr Gln Trp  
   50                      55                      60  
 Val Phe Ile Asn Met Leu Ile Lys Leu Phe Thr Gly Pro Val Ile Val  
   65                      70                      75                      80  
 Leu Asn Ser Cys Ser Phe Val Phe His Cys Leu Asp Val  
                     85                      90

<210> 570  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids

579

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 570

Xaa Gln Leu Asp Tyr Arg Glu Tyr Leu Glu Ser Tyr Leu Ser Tyr Pro  
 1 5 10 15

Leu Leu Xaa Asn Met Lys Ser His Ala Leu Asp Ile Leu Tyr Ile Ile  
 20 25 30

Arg Phe Leu Leu Cys Phe Trp Leu Cys Cys Pro Pro Ser Pro Trp Gly  
 35 40 45

Asp Ile Trp Glu Gln Thr Tyr Leu Asp Leu Glu  
 50 55

&lt;210&gt; 571

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 571

Ile Ile Tyr Phe Gln Cys Phe Leu His Val Leu Ile Cys Ser Phe Ser  
 1 5 10 15

Gln Leu Asn Ala Pro Thr Gly Leu Ser Pro Val Ser Ile Gln Ser Val  
 20 25 30

Glu Ile Lys Asp Ser Ser Phe Leu Leu Ile Ser Ile Leu Val Ser Ile  
 35 40 45

Leu Asn Leu Glu Thr Ser Cys Phe Tyr Asp Ile Ser His Leu Ile Phe  
 50 55 60

Phe Ile Phe Tyr Leu Arg Asn Met Lys Lys Lys Tyr Thr Lys Met Val  
 65 70 75 80

Lys Leu Leu His Lys Ser Ala Pro Ala Gln Ser Asp Ser Cys Lys Cys  
 85 90 95

Pro Phe Ile Cys Cys Val Cys Ile Ser Arg Ile Ser Ile Gly Ser Arg  
 100 105 110

Ser Gly Tyr Gln Tyr Ile Met His Arg Ser Val Gly Cys Leu Lys Ala  
 115 120 125

580

Lys Gln Glu Asn  
130

<210> 572  
<211> 145  
<212> PRT  
<213> Homo sapiens

<400> 572  
Val Gly Leu Ala Pro Leu Gln Arg Phe Trp Gly Ser Gly Cys Cys Val  
1 5 10 15  
Ser Pro Cys Leu Cys Pro Gly His Pro Lys Pro Phe Cys Tyr Leu Leu  
20 25 30  
Gly Leu Trp Glu Gly Phe Phe Phe Phe Phe Leu Glu Pro Ala Pro Val  
35 40 45  
Leu His Thr Ala Pro His Ala Ser Ala Ser Tyr Arg Cys Ala Ile Met  
50 55 60  
Gly Gly Met Gly Gly Ala Glu Gly Leu Pro His Pro Gly Gln Ala Lys  
65 70 75 80  
Ala Val Gly Arg Gly Ala Leu Pro Pro Phe Pro Ala Pro Ser Ser Ser  
85 90 95  
Leu Ile Lys Thr Trp Leu Leu Ile Phe Asn Lys Asp Leu Phe Val Thr  
100 105 110  
Glu Lys Lys Lys Lys Arg Ala Gly Arg Ser Lys Arg Ile Pro Arg Gly  
115 120 125  
Gly Pro Ser Phe Thr Arg Gly Met Ala Asn Val His Lys Leu Ser Ser  
130 135 140  
Leu  
145

<210> 573  
<211> 286  
<212> PRT  
<213> Homo sapiens

<400> 573  
Val Ile Ser Glu Arg Leu Ser Ala Cys Pro Pro Ser Arg Arg Val Ala  
1 5 10 15

581

Gly Ala Cys Ala Ser Arg Ser Thr Ser Leu Leu Leu Ser Arg Pro Arg  
                   20                  25                  30  
 Pro Gly Gly Pro Glu Arg Glu Ala Gly Thr Met Phe Arg Arg Lys Leu  
                   35                  40                  45  
 Thr Ala Leu Asp Tyr His Asn Pro Ala Gly Phe Asn Cys Lys Asp Glu  
                   50                  55                  60  
 Thr Glu Phe Arg Asn Phe Ile Val Trp Leu Glu Asp Gln Lys Ile Arg  
                   65                  70                  75                  80  
 His Tyr Lys Ile Glu Asp Arg Gly Asn Leu Arg Asn Ile His Ser Ser  
                   85                  90                  95  
 Asp Trp Pro Lys Phe Phe Glu Lys Tyr Leu Arg Asp Val Asn Cys Pro  
                   100                  105                  110  
 Phe Lys Ile Gln Asp Arg Gln Glu Ala Ile Asp Trp Leu Leu Gly Leu  
                   115                  120                  125  
 Ala Val Arg Leu Glu Tyr Gly Asp Asn Ala Glu Lys Tyr Lys Asp Leu  
                   130                  135                  140  
 Val Pro Asp Asn Ser Lys Thr Ala Asp Asn Ala Thr Lys Asn Ala Glu  
                   145                  150                  155                  160  
 Pro Leu Ile Asn Leu Asp Val Asn Asn Pro Asp Phe Lys Ala Gly Val  
                   165                  170                  175  
 Met Ala Leu Ala Asn Leu Leu Gln Ile Gln Arg His Asp Asp Tyr Leu  
                   180                  185                  190  
 Val Met Leu Lys Ala Ile Arg Ile Leu Val Gln Glu Arg Leu Thr Gln  
                   195                  200                  205  
 Asp Ala Val Ala Lys Ala Asn Gln Thr Lys Glu Gly Leu Pro Val Ala  
                   210                  215                  220  
 Leu Asp Lys His Ile Leu Gly Phe Asp Thr Gly Asp Ala Val Leu Asn  
                   225                  230                  235                  240  
 Glu Ala Ala Gln Ile Leu Arg Leu Leu His Ile Glu Glu Leu Arg Glu  
                   245                  250                  255  
 Leu Gln Thr Lys Ile Asn Glu Ala Ile Val Ala Val Gln Ala Ile Ile  
                   260                  265                  270  
 Ala Asp Pro Lys Thr Asp His Arg Leu Gly Lys Val Gly Arg  
                   275                  280                  285

582

&lt;210&gt; 574

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 574

Met Arg Lys Ile Arg His Arg Glu Val Lys Val Gly Ile Asp Pro Asn  
1 5 10 15

Leu His Asn Lys Ile Met Thr Ser Pro Ala Phe Lys Leu Ile Ile Lys  
20 25 30

Gly Trp Ala Gly Phe Val Leu Leu Tyr Val Ser Gly Asn Leu Tyr Leu  
35 40 45

Leu His Phe Pro Phe Ser Gln Asn Leu Ser His Met Thr Asn Ile  
50 55 60

&lt;210&gt; 575

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (155)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (165)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 575

Ala Ser Leu Pro Trp Ser Ser Tyr Glu Gln Glu Lys Glu Ala Leu Thr  
1 5 10 15

His Ser Phe Arg Glu Ala Ser Ser Thr Gln Gln Glu Thr Ile Asp Arg  
20 25 30

Leu Thr Ser Gln Leu Glu Ala Phe Gln Ala Lys Met Lys Arg Val Glu  
35 40 45

Glu Ser Ile Leu Ser Arg Asn Tyr Lys Lys His Ile Gln Asp Tyr Gly  
50 55 60



583

Ser Pro Ser Gln Phe Trp Glu Gln Glu Leu Glu Ser Leu His Phe Val  
 65 70 75 80  
 Ile Glu Met Lys Asn Glu Arg Ile His Glu Leu Asp Arg Arg Leu Ile  
 85 90 95  
 Leu Met Glu Thr Val Lys Glu Lys Asn Leu Ile Leu Glu Glu Lys Ile  
 100 105 110  
 Thr Thr Leu Gln Gln Glu Asn Glu Asp Leu His Val Arg Ser Arg Asn  
 115 120 125  
 Gln Val Val Leu Ser Arg Gln Leu Ser Glu Asp Leu Leu Leu Thr Arg  
 130 135 140  
 Glu Ala Leu Glu Lys Glu Val Gln Leu Arg Xaa Gln Leu Gln Gln Glu  
 145 150 155 160  
 Lys Glu Glu Leu Xaa Tyr Arg Val Leu Gly Ala Asn Ala Ser Pro Ala  
 165 170 175  
 Phe Pro Leu Ala Pro Val Thr Pro Thr Gly Lys Gly Gly  
 180 185

&lt;210&gt; 576

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 576

Arg Leu Leu Arg Asp Ala Asp Asp Leu Gln Lys Arg Leu Ala Val Tyr  
 1 5 10 15  
 Gln Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Leu Ser Ala Ile Arg  
 20 25 30  
 Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Val Arg Ala Ala Thr  
 35 40 45  
 Val Gly Ser Leu Ala Gly Gln Pro Leu Gln Glu Arg Ala Gln Ala Trp  
 50 55 60  
 Gly Glu Arg Leu Arg Ala Arg Met Glu Glu Met Gly Ser Arg Thr Arg  
 65 70 75 80  
 Asp Arg Leu Asp Glu Val Lys Glu Gln Val Ala Glu Val Arg Ala Lys  
 85 90 95  
 Leu Glu Glu Gln Ala Gln Gln Ile Arg Leu Gln Ala Glu Ala Phe Gln

584

100 105 110  
Ala Arg Leu Lys Ser Trp Phe Glu Pro Leu Val Glu Asp Met Gln Arg  
115 120 125  
Gln Trp Ala Gly Leu Val Glu Lys Val Gln Ala Ala Val Gly Thr Ser  
130 135 140  
Ala Ala Pro Val Pro Ser Asp Asn His  
145 150

<210> 577  
<211> 48  
<212> PRT  
<213> Homo sapiens

<400> 577  
Thr Glu Ile Thr Pro Leu His Ser Ser Leu Ala Lys Lys Leu Pro Lys  
1 5 10 15  
Asn Glu Pro Gln Asn Pro Gly Ala Asn Ser Ala Arg Gly Arg Gly Val  
20 25 30  
Asp Leu Thr Glu Pro Thr Gln Pro Thr Arg Asn Gln Cys Cys Ser Asn  
35 40 45

<210> 578  
<211> 98  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (41)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (66)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (93)

585

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 578

Lys Thr Ile Gln Asp Pro Leu Ala Ala Thr Leu Phe Ser Ser Ser Leu  
 1 5 10 15

Leu Asn Ser Ile Ser Lys Ile Gly Asn Arg Ala Arg Arg Ile Pro Ser  
 20 25 30

Thr Gln Pro Ser Ala Trp His Lys Xaa Val Gly Thr Ile Lys Phe Ser  
 35 40 45

Met Gly Trp Glu His Gly Tyr Ser Leu Gly Cys His Arg Lys Gly Val  
 50 55 60

Gly Xaa His Arg Ser His Ile His Leu Ile Ser Trp Asp Val Pro Leu  
 65 70 75 80

His Arg Gly Asn Thr Asn Phe Arg Gly Phe Trp Gly Xaa Gly Leu Gly  
 85 90 95

Ser Asp

&lt;210&gt; 579

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 579

Thr Tyr Asn Ile Lys Met Ala Ser Lys Arg Ala Leu Val Ile Leu Ala  
 1 5 10 15

Lys Gly Ala Glu Glu Met Glu Thr Val Ile Pro Val Asp Val Met Arg  
 20 25 30

Arg Ala Gly Ile Lys Val Thr Val Ala Gly Leu Ala Gly Lys Asp Pro  
 35 40 45

Val Gln Cys Ser Arg Asp Val Val Ile Cys Pro Asp Ala Ser Leu Glu  
 50 55 60

Asp Ala Lys Lys Glu Gly Pro Tyr Asp Val Val Val Leu Pro Gly Gly  
 65 70 75 80

Asn Leu Gly Ala Gln Asn Leu Ser Glu Ser Ala Ala Val Lys Glu Ile  
 85 90 95

Leu Lys Glu Gln Glu Asn Arg Lys Gly Leu Ile Ala Ala Ile Cys Ala

586

[illegible]

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<210> 580
<211> 192
<212> PRT
<213> Homo sapiens
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<400> 580
Asp Pro Arg Arg Pro Pro Thr Arg Pro Trp Gly Leu Pro Arg Ala Pro
 1             5             10             15
Ala Thr Ala Arg Thr Arg Gly Arg Ser Leu Asn Ile Pro Leu Thr Thr
      20             25             30
Arg Arg Arg Pro Ala Thr Glu Ala Pro Ser Thr Leu Ser Pro His Ile
      35             40             45
Val Ser Pro Ser Gly Phe Leu Gly Phe Ser Val Phe Ser Ser Phe Phe
      50             55             60
Phe Phe Leu Thr Arg Ser Val Leu Pro Val Asn Gln Gly Ser Val Ser
      65             70             75             80
Val Ser Val Gly Ser Gly Ser Arg Ala Phe Phe Pro Phe Ala Leu Ile
      85             90             95
Leu Arg Lys Ala Glu Pro Leu Gly Cys Gly Gly Arg Gly Gln Gly His
      100            105            110
Ile Pro Ile Arg Val Gly Arg Gly Ser Leu Leu Ala His Ser Gly Cys
      115            120            125

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587

Ala Gly Lys Lys Arg Pro Gly Leu Gly Arg Asn Arg Ser Pro Thr Val  
 130 135 140

Ser Gly Cys Leu Ala Ser Ser Pro Phe Cys Gln Leu Ser Ser Leu Trp  
 145 150 155 160

Phe Leu Cys Pro Gln Val Ser Gly Ser Ile His Lys Arg Lys Ile His  
 165 170 175

Phe Phe Pro Gln Gly Trp Gly Lys Asp Ser Gly Glu Ser Ala Arg Lys  
 180 185 190

<210> 581  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 581  
 Lys Asn Lys Gln Asn Tyr Val Ala Arg Leu Thr Val Val Met Phe Ile  
 1 5 10 15

Cys His Arg Ser Lys Val His Lys Val Tyr Gln Ile Tyr Ile Tyr Leu  
 20 25 30

Gly Tyr Leu Asp Arg Leu Leu Leu Phe Phe Phe Tyr Leu Ser Leu Gln  
 35 40 45

Glu Phe Gly Asn Ser Leu Ser Leu Phe Leu Ile Leu Lys Ile Leu Asn  
 50 55 60

Cys Asn Ser Phe Leu Leu Pro Asn Val Cys Val His Ile Gln Ser Asn  
 65 70 75 80

Glu Thr Ile Ser Ser His Thr Thr Thr Gly Val Gly Thr Phe Ser Gln  
 85 90 95

Ile Leu Met Cys Leu Tyr Val Asn Arg Cys Leu Tyr Glu Ile Phe Ser  
 100 105 110

<210> 582

588

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 582

Val Glu Gly Ala Pro Cys Pro Thr Ser Pro Val Val Pro Arg Leu His  
 1 5 10 15

Pro Val Ala Gly His Gly Pro Gly Pro Ser Cys Ile Cys Pro Phe Leu  
 20 25 30

Gly Tyr Ser Cys Gly Arg Cys Pro Arg Gly Arg Ser Asn Gly Thr Pro  
 35 40 45

Phe Pro Leu Pro Cys Pro Pro Pro Ala Ser Pro Pro Arg Pro Ala Thr  
 50 55 60

Trp Pro Ser Pro Phe Arg Ser Ser Ser Cys Asn Lys Cys Phe Asn Phe  
 65 70 75 80

&lt;210&gt; 583

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 583

Ala Glu Leu Pro Gly Gly Gln Asp Ala Gly Gly Gly Ala Leu Trp Pro  
 1 5 10 15

Leu Cys Gly Ser Arg Gly Leu Cys Val Ser Asp Arg Phe Pro Gly Asn  
 20 25 30

Phe Arg Ala Arg Leu Thr Ser Trp Lys Phe Lys Tyr Ser Ile Ala Leu  
 35 40 45

Val Ile Leu Gly Asn Leu Glu Lys Arg Pro Gly Leu Arg Ile Gln Thr  
 50 55 60

Trp Ala Leu Arg Trp Pro Arg Thr Cys Arg Leu His Leu Gln Pro Arg  
 65 70 75 80

Ala Leu Pro Gly Ser Ser Met Ala Asp Gln Ala Pro Phe Asp Thr Asp  
 85 90 95

Val Asn Thr Leu Thr Arg Phe Val Met Glu Glu Gly Arg Lys Ala Arg  
 100 105 110

589

Gly	Thr	Gly	Glu	Leu	Thr	Gln	Leu	Leu	Asn	Ser	Leu	Cys	Thr	Ala	Val		
		115					120					125					
Lys	Ala	Ile	Ser	Ser	Ala	Val	Arg	Lys	Ala	Gly	Ile	Ala	His	Leu	Tyr		
	130					135					140						
Gly	Ile	Ala	Gly	Ser	Thr	Asn	Val	Thr	Gly	Asp	Gln	Val	Lys	Lys	Leu		
145					150					155					160		
Asp	Val	Leu	Ser	Asn	Asp	Leu	Val	Met	Asn	Met	Leu	Lys	Ser	Ser	Phe		
				165					170					175			
Ala	Thr	Cys	Val	Leu	Val	Ser	Glu	Glu	Asp	Lys	His	Ala	Ile	Ile	Val		
			180					185						190			
Glu	Pro	Glu	Lys	Arg	Gly	Lys	Tyr	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp		
		195					200					205					
Gly	Ser	Ser	Asn	Ile	Asp	Cys	Leu	Val	Ser	Val	Gly	Thr	Ile	Phe	Gly		
	210					215					220						
Ile	Tyr	Arg	Lys	Lys	Ser	Thr	Asp	Glu	Pro	Ser	Glu	Lys	Asp	Ala	Leu		
225					230					235					240		
Gln	Pro	Gly	Arg	Asn	Leu	Val	Ala	Ala	Gly	Tyr	Ala	Leu	Tyr	Gly	Ser		
				245					250					255			
Ala	Thr	Met	Leu	Val	Leu	Ala	Met	Asp	Cys	Gly	Val	Asn	Cys	Phe	Met		
			260					265					270				
Leu	Asp	Pro	Ala	Ile	Gly	Glu	Phe	Ile	Leu	Val	Asp	Lys	Asp	Val	Lys		
		275					280					285					
Ile	Lys	Lys	Lys	Gly	Lys	Ile	Tyr	Ser	Leu	Asn	Glu	Gly	Tyr	Ala	Lys		
	290					295					300						
Asp	Phe	Asp	Pro	Ala	Val	Thr	Glu	Tyr	Ile	Gln	Arg	Lys	Lys	Phe	Pro		
305					310					315					320		
Pro	Asp	Asn	Ser	Ala	Pro	Tyr	Gly	Ala	Arg	Tyr	Val	Gly	Ser	Met	Val		
				325					330					335			
Ala	Asp	Val	His	Arg	Thr	Leu	Val	Tyr	Gly	Gly	Ile	Phe	Leu	Tyr	Pro		
			340					345					350				
Ala	Asn	Lys	Lys	Ser	Pro	Asn	Gly	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys		
		355					360					365					
Asn	Pro	Met	Ala	Tyr	Val	Met	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr		
					375						380						

590

Gly Lys Glu Ala Val Leu Asp Val Ile Pro Thr Asp Ile His Gln Arg  
 385 390 395 400

Ala Pro Val Ile Leu Gly Ser Pro Asp Asp Val Leu Glu Phe Leu Lys  
 405 410 415

Val Tyr Glu Lys His Ser Ala Gln  
 420

<210> 584

<211> 64

<212> PRT

<213> Homo sapiens

<400> 584

Arg Leu Ala Ser Asp Asn Thr Gly Ile Ile Val Asn Asn Val Lys Leu  
 1 5 10 15

Arg Phe Leu Ala Ser Ile Lys Gly Ala Val Ser Glu Met Ala Leu Ser  
 20 25 30

Cys Gln Ser Phe Leu Phe Thr Phe Phe Phe Cys Pro Glu Cys Ile Cys  
 35 40 45

Glu Glu Ser Leu Ile Leu Cys Phe Val Glu Ile Ser Thr Gln Pro Gln  
 50 55 60

<210> 585

<211> 194

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 585

Leu Val Leu Lys Xaa Lys Ile Ile Gly Ile Ser Leu Leu Ser Gly Leu  
 1 5 10 15

Leu His Arg Ala Phe Ser Val Phe Leu Phe Asn Thr Glu Asn Lys Leu  
 20 25 30



591

Leu Leu Gln Gln Arg Ser Asp Ala Lys Ile Thr Phe Pro Gly Cys Phe  
                   35                                  40                                  45  
 Thr Asn Thr Cys Cys Ser His Pro Leu Ser Asn Pro Ala Glu Leu Glu  
           50                                  55                                  60  
 Glu Ser Asp Ala Leu Gly Val Arg Arg Ala Ala Gln Arg Arg Leu Lys  
   65                                  70                                  75                                  80  
 Ala Glu Leu Gly Ile Pro Leu Glu Glu Val Pro Pro Glu Glu Ile Asn  
                                   85                                  90                                  95  
 Tyr Leu Thr Arg Ile His Tyr Lys Ala Gln Ser Asp Gly Ile Trp Gly  
                   100                                  105                                  110  
 Glu His Glu Ile Asp Tyr Ile Leu Leu Val Arg Lys Asn Val Thr Leu  
           115                                  120                                  125  
 Asn Pro Asp Pro Asn Glu Ile Lys Ser Tyr Cys Tyr Val Ser Lys Glu  
           130                                  135                                  140  
 Glu Leu Lys Glu Leu Leu Lys Lys Ala Ala Ser Gly Glu Ile Lys Ile  
   145                                  150                                  155                                  160  
 Thr Pro Trp Phe Lys Ile Ile Ala Ala Thr Phe Leu Phe Lys Trp Trp  
                   165                                  170                                  175  
 Asp Asn Leu Asn His Leu Asn Gln Phe Val Asp His Glu Lys Ile Tyr  
           180                                  185                                  190  
 Arg Met

&lt;210&gt; 586

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 586

Pro Ala Ala Thr Thr Ser Ser Ser Leu Leu Ala Leu His Arg Val Leu  
   1                                  5                                  10                                  15  
 Pro Phe Gln Tyr Val Pro Ser Asp Glu Thr Ile Ser Ser Ala Glu Ser  
           20                                  25                                  30  
 Phe Ser Thr Met Trp Lys Trp Ile Leu Thr His Cys Ala Ser Ala Phe  
           35                                  40                                  45

592

Pro His Leu Pro Gly Cys Cys Cys Cys Cys Phe Leu Leu Leu Phe Leu  
 50 55 60  
 Val Ser Ser Val Pro Val Thr Cys Gln Ala Leu Gly Gln Asp Met Val  
 65 70 75 80  
 Ser Pro Glu Ala Thr Asn Ser Ser Ser Ser Ser Phe Ser Ser Pro Ser  
 85 90 95  
 Ser Ala Gly Arg His Val Arg Ser Tyr Asn His Leu Gln Gly Asp Val  
 100 105 110  
 Arg Trp Arg Lys Leu Phe Ser Phe Thr Lys Tyr Phe Leu Lys Ile Glu  
 115 120 125  
 Lys Asn Gly Lys Val Ser Gly Thr Lys Lys Glu Asn Cys Pro Tyr Ser  
 130 135 140  
 Ile Leu Glu Ile Thr Ser Val Glu Ile Gly Val Val Ala Val Lys Ala  
 145 150 155 160  
 Ile Asn Ser Asn Tyr Tyr Leu Ala Met Asn Lys Lys Gly Lys Leu Tyr  
 165 170 175  
 Gly Ser Lys Glu Phe Asn Asn Asp Cys Lys Leu Lys Glu Arg Ile Glu  
 180 185 190  
 Glu Asn Gly Tyr Asn Thr Tyr Ala Ser Phe Asn Trp Gln His Asn Gly  
 195 200 205  
 Arg Gln Met Tyr Val Ala Leu Asn Gly Lys Gly Ala Pro Arg Arg Gly  
 210 215 220  
 Gln Lys Thr Arg Arg Lys Asn Thr Ser Ala His Phe Leu Pro Met Val  
 225 230 235 240  
 Val His Ser

&lt;210&gt; 587

&lt;211&gt; 366

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

593

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (120)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (132)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 587

Ser	His	Cys	Leu	Lys	Lys	Asn	Leu	Ser	Lys	Arg	Ser	Leu	Gln	Phe	Leu
1				5					10					15	

Gly	Lys	Gln	Ser	Ile	Leu	Ser	Val	Arg	Leu	Glu	Gln	Cys	Pro	Leu	Gln
			20					25					30		

Leu	Asn	Asn	Pro	Phe	Asn	Glu	Tyr	Ser	Lys	Phe	Xaa	Gly	Lys	Gly	His
			35				40					45			

Val	Gly	Thr	Thr	Ala	Thr	Lys	Lys	Ile	Asp	Val	Tyr	Leu	Pro	Leu	His
	50					55					60				

Ser	Ser	Gln	Asp	Arg	Leu	Leu	Pro	Met	Thr	Val	Val	Thr	Met	Ala	Ser
65					70					75					80

Ala	Arg	Val	Gln	Asp	Leu	Ile	Gly	Leu	Ile	Cys	Trp	Gln	Tyr	Thr	Ser
				85					90					95	

Glu	Asp	Gly	Ser	Arg	Ser	Ser	Met	Thr	Met	Ser	Val	Pro	Thr	Ala	Cys
			100					105					110		

Ile	Leu	Leu	Arg	Met	Met	Gly	Xaa	Trp	Thr	Pro	Ile	Phe	Pro	Arg	Trp
	115						120					125			

Xaa	Pro	Met	Xaa	Pro	Ile	His	Lys	Phe	Gly	Phe	Ser	Thr	Leu	Ala	Leu
	130					135					140				

Val	Glu	Lys	Tyr	Ser	Ser	Pro	Gly	Leu	Thr	Ser	Lys	Glu	Ser	Leu	Phe
145					150					155					160

Val	Arg	Ile	Asn	Ala	Ala	His	Gly	Phe	Ser	Leu	Ile	Gln	Val	Asp	Asn
			165						170					175	

Thr	Lys	Val	Thr	Met	Lys	Glu	Ile	Leu	Leu	Lys	Ala	Val	Lys	Arg	Arg
			180					185						190	

594

Lys Gly Ser Gln Lys Val Ser Gly Ser Arg Ala Asp Gly Val Phe Glu  
 195 200 205  
 Glu Asp Ser Gln Ile Asp Ile Ala Thr Val Gln Asp Met Leu Ser Ser  
 210 215 220  
 His His Tyr Lys Ser Phe Lys Val Ser Met Ile His Arg Leu Arg Phe  
 225 230 235 240  
 Thr Thr Asp Val Gln Leu Gly Ile Ser Gly Asp Lys Val Glu Ile Asp  
 245 250 255  
 Pro Val Thr Asn Gln Lys Ala Ser Thr Lys Phe Trp Ile Lys Gln Lys  
 260 265 270  
 Pro Ile Ser Ile Asp Ser Asp Leu Leu Cys Ala Cys Asp Leu Ala Glu  
 275 280 285  
 Glu Lys Ser Pro Ser His Ala Ile Phe Lys Leu Thr Tyr Leu Ser Asn  
 290 295 300  
 His Asp Tyr Lys His Leu Tyr Phe Glu Ser Asp Ala Ala Thr Val Asn  
 305 310 315 320  
 Glu Ile Val Leu Lys Val Asn Tyr Ile Leu Glu Ser Arg Ala Ser Thr  
 325 330 335  
 Ala Arg Ala Asp Tyr Phe Ala Gln Lys Gln Arg Lys Leu Asn Arg Arg  
 340 345 350  
 Thr Ser Phe Ser Phe Gln Lys Glu Lys Lys Ser Gly Gln Gln  
 355 360 365

&lt;210&gt; 588

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 588

Cys Cys Lys Ser Gly Trp Ala Ile His Ser Leu Ser Glu Leu Thr Glu  
 1 5 10 15  
 Leu Glu Leu Ala Val Lys Cys Ser Ala Glu Thr Glu His Leu Thr Asp  
 20 25 30  
 Ile Phe Leu Gln Lys Met Val Leu Gly Asn Lys Ile Ile Thr Ile Arg  
 35 40 45

595

Glu Trp Leu Val Val Ser Thr Val Ala Asn Ala Asn Cys Trp Asn Ser  
     50                    55                    60  
 Leu Tyr Cys Arg Lys Thr Gln Thr Glu Thr Leu Lys Phe Cys Leu Ala  
     65                    70                    75                    80  
 Met Cys Phe Trp Tyr Glu Thr Asn Tyr Cys Val Thr Val Gln Val Gly  
                     85                    90                    95  
 Asn Asn Ser Phe Asn Trp Val Phe Ser Ile Asn Gly Asn  
                     100                    105

<210> 589  
 <211> 74  
 <212> PRT  
 <213> Homo sapiens

<400> 589  
 Ser Cys Arg Arg Gly Arg Asp His Ser Gly Ser Gly Val Gly Thr Ala  
     1                    5                    10                    15  
 Met Ala Gly Ala Leu Val Arg Lys Ala Ala Asp Tyr Val Arg Ser Lys  
                     20                    25                    30  
 Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly Pro Val Ala  
                     35                    40                    45  
 Asn Trp Gly Leu Pro Ile Ala Ala Ile Asn Asp Met Lys Lys Ser Pro  
     50                    55                    60  
 Glu Ile Ile Ser Gly Arg Met Thr Phe Gly  
     65                    70

<210> 590  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 590  
 Val Ile Met Tyr Ile Leu Gln Ser Gly Gly Trp Gln Asp Gly Asp Ile  
     1                    5                    10                    15  
 Glu His Asp Cys Ser Leu Ser Leu Phe Ser Ala Tyr Gly Tyr Leu Ser  
                     20                    25                    30  
 Ser Ile Ser Ile Cys Ile Phe Ser Ser Phe His Phe Arg Lys Gln Ser  
                     35                    40                    45

596

Cys Gln Leu Lys Gln Lys Lys Lys Lys Lys Lys Ser Ser Arg Gln His  
 50 55 60  
 Thr Val Glu Ser Cys Thr His Thr Ser Ala Gln Ala Arg Cys Leu Ala  
 65 70 75 80  
 Glu Pro Gln Ser Gly Lys Arg Val Pro Ala Ser Gly Phe Leu Gly Ile  
 85 90 95  
 Asn Phe Ile Thr Val Tyr Leu Ser His Cys Gly His Ala Ile Trp Gln  
 100 105 110  
 Gly Glu Asn Gly Arg Leu Gly Leu Leu Cys Glu Ala Val  
 115 120 125

&lt;210&gt; 591

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 591

Pro Val Phe Phe Ser Leu Leu Leu Leu Gln Lys Gln Trp Xaa Cys Leu  
 1 5 10 15  
 Leu Asp Ser Lys Trp Ala Lys Ala Lys Lys Gly Glu Glu Ala Leu Phe  
 20 25 30  
 Thr Thr Arg Glu Ser Val Val Asp Tyr Cys Asn Arg Leu Leu Lys Lys  
 35 40 45  
 Gln Phe Phe His Arg Ala Leu Lys Val Met Lys Met Lys Tyr Asp Lys  
 50 55 60  
 Asp Ile Lys Lys Glu Lys Asp Lys Gly Lys Ala Glu Ser Gly Lys Glu  
 65 70 75 80  
 Glu Asp Lys Lys Ser Lys Lys Glu Asn Ile Lys Asp Glu Lys Thr Lys  
 85 90 95  
 Lys Glu Lys Glu Lys Lys Lys Asp Gly Glu Lys Glu Glu Ser Lys Lys  
 100 105 110  
 Glu Glu Thr Pro Gly Thr Pro Lys Lys Lys Glu Thr Lys Lys Lys Phe

597

115	120	125
Lys Leu Glu Pro His Asp Asp Gln Val Phe Leu Asp Gly Asn Glu Val		
130	135	140
Tyr Val Trp Ile Tyr Asp Pro Val His Phe Lys Thr Phe Val Met Gly		
145	150	155
Leu Ile Leu Val Ile Ala Val Ile Ala Ala Thr Leu Phe Pro Leu Trp		
165	170	175
Pro Ala Glu Met Arg Val Gly Val Tyr Tyr Leu Ser Val Gly Ala Gly		
180	185	190
Cys Phe Val Ala Ser Ile Leu Leu Leu Ala Val Ala Arg Cys Ile Leu		
195	200	205
Phe Leu Ile Ile Trp Leu Ile Thr Gly Gly Arg His His Phe Trp Phe		
210	215	220
Leu Pro Asn Leu Thr Ala Asp Val Gly Phe Ile Asp Ser Phe Arg Pro		
225	230	235
Leu Tyr Thr His Glu Tyr Lys Gly Pro Lys Ala Asp Leu Lys Lys Asp		
245	250	255
Glu Lys Ser Glu Thr Lys Lys Gln Gln Lys Ser Asp Ser Glu Glu Lys		
260	265	270
Ser Asp Ser Glu Lys Lys Glu Asp Glu Glu Gly Lys Val Gly Pro Gly		
275	280	285
Asn His Gly Thr Glu Gly Ser Gly Gly Glu Arg His Ser Asp Thr Asp		
290	295	300
Ser Asp Arg Arg Glu Asp Asp Arg Ser Gln His Ser Ser Gly Asn Gly		
305	310	315
Asn Asp Phe Glu Met Ile Thr Lys Glu Glu Leu Glu Gln Gln Thr Asp		
325	330	335
Gly Asp Cys Glu Glu Asp Glu Glu Glu Glu Asn Asp Gly Glu Thr Pro		
340	345	350
Lys Ser Ser His Glu Lys Ser		
355		

&lt;210&gt; 592

&lt;211&gt; 111

598

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 592

Val	Leu	Cys	Gln	Asn	Cys	Gln	Ser	Val	Val	Glu	Tyr	Ser	Lys	Asn	Asn
1				5					10					15	

Lys	Gly	Cys	Glu	Gln	Ser	Arg	Met	Val	Phe	Xaa	Leu	Tyr	Ser	Arg	Asp
			20					25						30	

Ser	Gly	Pro	Pro	Pro	Ser	Thr	Val	Ser	Glu	Ala	Glu	Phe	Glu	Asp	Ile
		35					40					45			

Met	Lys	Arg	Asn	Arg	Ala	Ile	Ser	Ser	Ser	Pro	Ile	Ser	Lys	Ala	Val
	50					55					60				

Ser	Gly	Ala	Ser	Ala	Gly	Asp	Tyr	Ser	Asp	Ala	Ile	Glu	Thr	Leu	Leu
65					70					75					80

Thr	Ala	Ile	Ala	Val	Ile	Lys	Gln	Ser	Arg	Val	Ala	Asn	Asp	Glu	Arg
				85					90					95	

Cys	Arg	Val	Leu	Ile	Ser	Ser	Leu	Lys	Asp	Cys	Leu	His	Gly	His	
			100					105					110		

&lt;210&gt; 593

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (158)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



599

&lt;400&gt; 593

Lys Thr Gly Lys Ile Leu Ala Asn Met Glu Leu Pro Gly Ser Ser Leu  
 1 5 10 15  
 Asn Ile Leu Thr Val Tyr Ala Arg Glu His Thr Phe Ser Phe Glu Asn  
 20 25 30  
 Ser Ala Ser Ser Lys Pro Pro Pro Thr Ile Gly Tyr His Phe Tyr Gly  
 35 40 45  
 Pro Ser Gly Asp Ala Ser Glu Leu Trp Xaa Lys Asn Gly Asp Leu Leu  
 50 55 60  
 Thr Met Lys Glu Tyr His Cys Leu Leu Gln Leu Leu Cys Pro Asp Phe  
 65 70 75 80  
 Pro Leu Glu Leu Xaa Gln Lys Ala Ala Arg Ile Val Leu Met Asp Asp  
 85 90 95  
 Ala Met Asp Cys Leu Met Ser Phe Ser Asp Phe Leu Phe Ala Phe Gln  
 100 105 110  
 Ile Gln Phe Tyr Tyr Ser Glu Phe Leu Asp Ser Val Ala Ala Ile Tyr  
 115 120 125  
 Glu Asp Leu Leu Ser Gly Lys Asn Pro Asn Thr Val Ile Gly Ala Asp  
 130 135 140  
 Leu Val Gln Trp Ala Ala Pro Pro Arg Pro Ala Leu Gly Xaa Ala Arg  
 145 150 155 160  
 His Ala

&lt;210&gt; 594

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 594

Ser Val Ala Ser Ser Arg Gly Thr Ala Cys Asp Leu Pro Ala Arg Gly  
 1 5 10 15  
 Pro Met Leu Pro Ala Ala Ala Arg Pro Leu Trp Gly Pro Cys Leu Gly  
 20 25 30  
 Leu Arg Ala Ala Ala Phe Arg Leu Ala Arg Arg Gln Val Pro Cys Val  
 35 40 45

600

Cys Ala Val Arg His Met Arg Ser Ser Gly His Gln Arg Cys Glu Ala  
 50 55 60  
 Leu Ala Gly Ala Pro Leu Asp Asn Ala Pro Lys Glu Tyr Pro Pro Lys  
 65 70 75 80  
 Ile Gln Gln Leu Val Gln Asp Ile Ala Ser Leu Thr Leu Leu Glu Ile  
 85 90 95  
 Ser Asp Leu Asn Glu Leu Leu Lys Lys Thr Leu Lys Ile Gln Asp Val  
 100 105 110  
 Gly Leu Val Pro Met Gly Gly Val Met Ser Gly Ala Val Pro Ala Ala  
 115 120 125  
 Ala Ala Gln Glu Ala Val Glu Glu Asp Ile Pro Ile Ala Lys Glu Arg  
 130 135 140  
 Thr His Phe Thr Val Arg Leu Thr Glu Ala Asn Arg Gly Gln Ser Glu  
 145 150 155 160  
 Ala Asp Gln Gly Asn Gln Glu Leu His Pro Arg His Gln Pro Arg Pro  
 165 170 175  
 Gly Lys Glu Ala Gly Gly Val Pro Ala Pro Gly Asn Gln Ser Gln Cys  
 180 185 190  
 Arg Gln Ser  
 195

&lt;210&gt; 595

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 595

Ala Pro Gln Trp Gln Val His Leu Gln Val Pro Gly Leu Tyr Tyr Phe  
 1 5 10 15  
 Thr Tyr His Ala Ser Ser Arg Gly Asn Leu Cys Val Asn Leu Met Arg  
 20 25 30  
 Gly Arg Glu Arg Ala Gln Lys Val Val Thr Phe Cys Asp Tyr Ala Tyr  
 35 40 45  
 Asn Thr Phe Gln Val Thr Thr Gly Gly Met Val Leu Lys Leu Glu Gln  
 50 55 60

601

Gly Glu Asn Val Phe Leu Gln Ala Thr Asp Lys Asn Ser Leu Leu Gly  
 65 70 75 80

Met Glu Gly Ala Asn Ser Ile Phe Ser Gly Phe Leu Leu Phe Pro Asp  
 85 90 95

Met Glu Ala

<210> 596

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 596

Ala Glu Asp Pro Ala Gly Gly Leu Ala Gly Gln Asp Thr Met Phe Ala  
 1 5 10 15

Arg Gly Leu Lys Arg Lys Cys Val Gly His Glu Glu Asp Val Glu Gly  
 20 25 30

Ala Leu Ala Gly Leu Lys Thr Val Ser Ser Tyr Ser Leu Gln Arg Gln  
 35 40 45

Ser Leu Leu Asp Met Ser Leu Val Lys Leu Gln Leu Cys His Met Leu  
 50 55 60

Val Glu Pro Asn Leu Cys Arg Ser Val Leu Ile Ala Asn Thr Val Arg  
 65 70 75 80

Gln Ile Gln Glu Glu Met Thr Gln Asp Gly Thr Trp Arg Thr Val Ala  
 85 90 95

Pro Gln Ala Ala Glu Arg Ala Pro Xaa Asp Arg Leu Val Ser Thr Glu  
 100 105 110

Ile Leu Cys Arg Ala Ala Trp Gly Gln Glu Gly Ala His Pro Ala Pro  
 115 120 125

Gly Leu Gly Asp Gly His Thr Gln Gly Pro Val Ser Asp Leu Cys Pro  
 130 135 140

Val Thr Ser Ala Gln Ala Pro Arg His Leu Gln Ser Ser Ala Trp Glu  
 145 150 155 160

602

Met Asp Gly Pro Arg Glu Asn Arg Gly Ser Phe His Lys Ser Leu Asp  
                           165                          170                          175

Gln Ile Phe Glu Thr Leu Glu Thr Lys Asn Pro Ser Cys Met Glu Glu  
                           180                          185                          190

Leu Phe Ser Asp Val Asp Ser Pro Tyr Tyr Asp Leu Asp Thr Val Leu  
                           195                          200                          205

Thr Gly Met Met Gly Gly Ala Arg Pro Gly Pro Cys Glu Gly Leu Glu  
                           210                          215                          220

Gly Leu Ala Pro Ala Thr Pro Gly Pro Ser Ser Ser Cys Lys Ser Asp  
 225                          230                          235                          240

Leu Gly Glu Leu Asp His Val Val Glu Ile Leu Val Glu Thr  
                           245                          250

&lt;210&gt; 597

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 597

Cys Ser Met Val Pro Ser Ser Ala Ser Xaa Gln Val Arg Ser His Tyr  
   1                          5                          10                          15

Val Asp Trp Arg Met Trp Arg Asp Val Lys Arg Arg Lys Met Ala Tyr  
                           20                          25                          30

Glu Tyr Ala Asp Glu Arg Leu Arg Ile Asn Ser Leu Arg Lys Asn Thr  
                           35                          40                          45

Ile Leu Pro Lys Ile Leu Gln Asp Val Ala Asp Glu Glu Ile Ala Ala  
   50                          55                          60

Leu Pro Arg Asp Ser Cys Pro Val Arg Ile Arg Asn Arg Cys Val Met  
   65                          70                          75                          80

Thr Ser Arg Pro Arg Gly Val Lys Arg Arg Trp Arg Leu Ser Arg Ile  
                           85                          90                          95

Val Phe Arg His Leu Ala Asp His Gly Gln Leu Ser Gly Ile Gln Arg

603

100                                      105                                      110  
 Ala Thr Trp  
       115  
  
 <210> 598  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 598  
 Ala Arg Pro Cys Met Asn Ser Thr Lys Ala Leu Pro His Gly Arg Glu  
   1                          5                          10                          15  
 His Thr Arg Leu Lys Met Leu Ser Tyr Leu Lys Asn Lys Met Cys Lys  
                   20                          25                          30  
 Ser Ser Gly Trp His Lys Thr Lys Val Asn Ala Ser Trp Gly Thr Phe  
           35                          40                          45  
 Leu Arg Gly Leu Ala Glu Cys Val Asn Ile Ile Asp Phe Cys Leu Cys  
   50                          55                          60  
 Tyr Met Thr Ser Val Thr Ser Leu Lys Ile Cys Thr Ile Gln Phe Gln  
   65                          70                          75                          80  
 Leu Trp Ile Thr Ser Val Asp Leu Cys Glu Gly Phe Tyr Leu Cys Arg  
                   85                          90                          95  
  
 Met Gly Val

<210> 599  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (56)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 599  
 Arg Ala Glu Leu Leu Gly Cys Arg His Tyr Glu Val Ala Arg Leu Leu  
   1                          5                          10                          15  
 Lys Glu Leu Pro Arg Gly Arg Thr Phe Thr Leu Lys Leu Thr Glu Pro

604

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                20                25                30
Arg Lys Ala Phe Asp Met Ile Ser Gln Arg Ser Ala Gly Gly Arg Pro
      35                40                45
Gly Ser Gly Pro Gln Leu Gly Xaa Gly Arg Gly Thr Leu Arg Leu Arg
      50                55                60
Ser Arg Gly Pro Ala Thr Val Glu Asp Leu Pro Ser Ala Phe Glu Glu
      65                70                75                80
Lys Ala Ile Glu Lys Val Asp Asp Leu Leu Glu Ser Tyr Met Gly Ile
      85                90                95
Arg Asp Thr Glu Leu Ala Ala Thr Met Val Glu Leu Gly Lys Asp Lys
      100                105                110
Arg Asn Pro Asp Glu Leu Ala Glu Ala Leu Asp Glu Arg Leu Gly Asp
      115                120                125
Phe Ala Phe Pro Asp Glu Phe Val Phe Asp Val Trp Gly Ala Ile Gly
      130                135                140
Asp Ala Lys Val Gly Arg Tyr
      145                150

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&lt;210&gt; 600

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 600

```

Ser Thr His Ala Ser Gly Ala Ser Gly Gly Ala Gln Val Ala Gly Arg
  1                5                10                15
Leu Gly Leu Gly Cys Pro Leu His Leu His Val Phe Ala Val Val Ser
      20                25                30
Ala Met Leu Pro Leu Leu Arg Cys Val Pro Arg Val Leu Gly Ser Ser
      35                40                45
Val Ala Gly Leu Arg Ala Ala Ala Pro Ala Ser Pro Phe Arg Gln Leu
      50                55                60
Leu Gln Pro Ala Pro Arg Leu Cys Thr Arg Pro Phe Gly Leu Leu Ser
      65                70                75                80
Val Arg Ala Gly Ser Glu Arg Arg Pro Gly Leu Leu Arg Pro Arg Gly
      85                90                95

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605

Pro Cys Ala Cys Gly Cys Gly Cys Gly Ser Leu His Thr Asp Gly Asp  
                   100                  105                  110  
 Lys Ala Phe Val Asp Phe Leu Ser Asp Glu Ile Lys Glu Glu Arg Lys  
                   115                  120                  125  
 Ile Gln Lys His Lys Thr Leu Pro Lys Met Ser Gly Gly Trp Glu Leu  
                   130                  135                  140  
 Glu Leu Asn Gly Thr Glu Ala Lys Leu Val Arg Lys Val Ala Gly Glu  
 145                  150                  155                  160  
 Lys Ile Thr Val Thr Phe Asn Ile Asn Asn Ser Ile Pro Pro Thr Phe  
                   165                  170                  175  
 Asp Gly Glu Glu Glu Pro Ser Gln Gly Gln Lys Val Glu Glu Gln Glu  
                   180                  185                  190  
 Pro Glu Leu Thr Ser Thr Pro Asn Phe Val Val Glu Val Ile Lys Asn  
                   195                  200                  205  
 Asp Asp Gly Lys Lys Ala Leu Val Leu Asp Cys His Tyr Pro Glu Asp  
                   210                  215                  220  
 Glu Val Gly Gln Glu Asp Glu Ala Glu Ser Asp Ile Phe Ser Ile Arg  
 225                  230                  235                  240  
 Glu Val Ser Phe Gln Ser Thr Gly Glu Ser Glu Trp Lys Asp Thr Asn  
                   245                  250                  255  
 Tyr Thr Leu Asn Thr Asp Ser Leu Asp Trp Ala Leu Tyr Asp His Leu  
                   260                  265                  270  
 Met Asp Phe Leu Ala Asp Arg Gly Val Asp Asn Thr Phe Ala Asp Glu  
                   275                  280                  285  
 Leu Val Glu Leu Ser Thr Ala Leu Glu His Gln Glu Tyr Ile Thr Phe  
                   290                  295                  300  
 Leu Glu Asp Leu Lys Ser Phe Val Lys Ser Gln  
 305                  310                  315

&lt;210&gt; 601

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 601

606

Gly Arg Gly Ser Ala Lys Lys Arg Pro Leu Pro Leu Val Gly Ile Gly  
 1 5 10 15  
 Met Ser Lys Asn Thr Val Ser Ser Ala Arg Phe Arg Lys Val Asp Val  
 20 25 30  
 Asp Glu Tyr Asp Glu Asn Lys Phe Val Asp Glu Glu Asp Gly Gly Asp  
 35 40 45  
 Gly Gln Ala Gly Pro Asp Glu Gly Glu Val Asp Ser Cys Leu Arg Gln  
 50 55 60  
 Gly Asn Met Thr Ala Ala Leu Gln Ala Ala Leu Lys Asn Pro Pro Ile  
 65 70 75 80  
 Asn Thr Lys Ser Gln Ala Val Lys Asp Arg Ala Gly Ser Ile Val Leu  
 85 90 95  
 Lys Val Leu Ile Ser Phe Lys Ala Asn Asp Ile Glu Lys Ala Val Gln  
 100 105 110  
 Ser Leu Asp Lys Asn Gly Val Asp Leu Leu Met Lys Tyr Ile Tyr Lys  
 115 120 125  
 Gly Phe Glu Ser Pro Ser Asp Asn Ser Ser Ala Met Leu Leu Gln Trp  
 130 135 140  
 His Glu Lys Ala Leu Ala Ala Gly Gly Val Gly Ser Ile Val Arg Val  
 145 150 155 160  
 Leu Thr Ala Arg Lys Thr Val  
 165

&lt;210&gt; 602

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 602

Leu Cys Phe Cys Leu Pro Pro Asp Tyr Leu Tyr Cys Gly Phe Lys Tyr  
 1 5 10 15  
 Ala Thr Phe Ser Gln His Pro Ile Ile Met Ala Pro Gln Phe Ile Cys  
 20 25 30  
 Gly His Pro Gly Phe Arg Ala Arg Ser Leu Ala Leu Tyr Lys Cys Ile  
 35 40 45  
 His Lys Ile Ser Glu Leu Val Gly His Glu His Gln Thr Phe Val Pro



607

50                                      55                                      60  
 Leu Ile Trp Leu Cys Leu Glu Lys Thr Ala Asn Gln Lys Glu  
 65                                      70                                      75  
  
 <210> 603  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 603  
 Ala His Ala Ser Ala Trp Leu Leu Ser Glu Lys Lys Gly Val Trp Gly  
 1                                      5                                      10                                      15  
 Val Phe Tyr Lys Ala Ala Val Ile Gly Thr Arg Leu His Ala Ala Val  
 20                                      25                                      30  
 Ala Ile Ala Cys Val Val Met Ala Phe Tyr Val Leu Phe Ile Lys  
 35                                      40                                      45  
  
 <210> 604  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 604  
 Val Gly Gly Ala Ser Arg Leu Leu Leu Arg Ile Ser Val Asp Leu Met  
 1                                      5                                      10                                      15  
 Glu Ala Lys Thr Leu Gly Thr Val Thr Pro Arg Lys Pro Val Leu Ser  
 20                                      25                                      30  
 Val Ser Ala Arg Lys Ile Lys Asp Asn Ala Ala Asp Trp His Asn Leu  
 35                                      40                                      45  
 Ile Leu Lys Trp Glu Thr Leu Asn Asp Ala Gly Phe Thr Thr Ala Asn  
 50                                      55                                      60  
 Asn Ile Ala Asn Leu Lys Ile Ser Leu Leu Asn Lys Asp Lys Ile Glu  
 65                                      70                                      75                                      80  
 Leu Asp Ser Ser Ser Pro Ala Ser Lys Glu Asn Glu Glu Lys Val Cys  
 85                                      90                                      95  
 Leu Glu Tyr Asn Glu Glu Leu Glu Lys Leu Cys Glu Glu Leu Gln Ala  
 100                                      105                                      110

608

Thr Leu Asp Gly Leu Thr Lys Ile Gln Val Lys Met Glu Lys Leu Ser  
 115 120 125

Ser Thr Thr Lys Gly Ile Cys Glu Leu Glu Asn Tyr His Tyr Gly Glu  
 130 135 140

Glu Ser Lys Arg Pro Pro Leu Phe His Thr Trp Pro Thr Thr His Phe  
 145 150 155 160

Tyr Glu Val Ser His Lys Leu Leu Glu Met Tyr Arg Lys Glu Leu Leu  
 165 170 175

Leu Lys Arg Thr Val Ala Lys Glu Leu Ala His Thr Gly Asp Pro Asp  
 180 185 190

Leu Thr Leu Ser Tyr Leu Ser Met Trp Leu His Gln Pro Tyr Val Glu  
 195 200 205

Ser Asp Ser Arg Leu His Leu Glu Ser Met Leu Leu Glu Thr Gly His  
 210 215 220

Arg Ala Leu  
 225

<210> 605

<211> 119

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 605

Asn Glu Ile His Trp Ala Ala Val His Trp Ala Arg Pro Cys Ser Ser  
 1 5 10 15

Gly Gly Phe His Asp Ala Ser His Ile Gln Cys Phe Pro Ser Lys Pro

609

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<210> 606
<211> 406
<212> PRT
<213> Homo sapiens
```

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<400> 606
Val Val Arg Leu Gln Arg Leu Phe Pro Gly Arg Thr Met Asp Ser Gln
  1                      5                      10                      15
Gly Arg Lys Val Val Val Cys Asp Asn Gly Thr Gly Phe Val Lys Cys
      20                      25                      30
Gly Tyr Ala Gly Ser Asn Phe Pro Glu His Ile Phe Pro Ala Leu Val
      35                      40                      45
Gly Arg Pro Ile Ile Arg Ser Thr Thr Lys Val Gly Asn Ile Glu Ile
      50                      55                      60
Lys Asp Leu Met Val Gly Asp Glu Ala Ser Glu Leu Arg Ser Met Leu
      65                      70                      75                      80
Glu Val Asn Tyr Pro Met Glu Asn Gly Ile Val Arg Asn Trp Asp Asp
      85                      90                      95
Met Lys His Leu Trp Asp Tyr Thr Phe Gly Pro Glu Lys Leu Asn Ile
      100                      105                      110
Asp Thr Arg Asn Cys Lys Ile Leu Leu Thr Glu Pro Pro Met Asn Pro
      115                      120                      125

```

Thr	Lys	Asn	Arg	Glu	Lys	Ile	Val	Glu	Val	Met	Phe	Glu	Thr	Tyr	Gln
	130					135					140				
Phe	Ser	Gly	Val	Tyr	Val	Ala	Ile	Gln	Ala	Val	Leu	Thr	Leu	Tyr	Ala
145					150					155					160
Gln	Gly	Leu	Leu	Thr	Gly	Val	Val	Val	Asp	Ser	Gly	Asp	Gly	Val	Thr
				165					170					175	
His	Ile	Cys	Pro	Val	Tyr	Glu	Gly	Phe	Ser	Leu	Pro	His	Leu	Thr	Arg
			180					185					190		
Arg	Leu	Asp	Ile	Ala	Gly	Arg	Asp	Ile	Thr	Arg	Tyr	Leu	Ile	Lys	Leu
		195					200					205			
Leu	Leu	Leu	Arg	Gly	Tyr	Ala	Phe	Asn	His	Ser	Ala	Asp	Phe	Glu	Thr
	210					215					220				
Val	Arg	Met	Ile	Lys	Glu	Lys	Leu	Cys	Tyr	Val	Gly	Tyr	Asn	Ile	Glu
225					230					235					240
Gln	Glu	Gln	Lys	Leu	Ala	Leu	Glu	Thr	Thr	Val	Leu	Val	Glu	Ser	Tyr
				245					250					255	
Thr	Leu	Pro	Asp	Gly	Arg	Ile	Ile	Lys	Val	Gly	Gly	Glu	Arg	Phe	Glu
			260					265					270		
Ala	Pro	Glu	Ala	Leu	Phe	Gln	Pro	His	Leu	Ile	Asn	Val	Glu	Gly	Val
		275					280					285			
Gly	Val	Ala	Glu	Leu	Leu	Phe	Asn	Thr	Ile	Gln	Ala	Ala	Asp	Ile	Asp
	290					295					300				
Thr	Arg	Ser	Glu	Phe	Tyr	Lys	His	Ile	Val	Leu	Ser	Gly	Gly	Ser	Thr
305					310					315					320
Met	Tyr	Pro	Gly	Leu	Pro	Ser	Arg	Leu	Glu	Arg	Glu	Leu	Lys	Gln	Leu
				325					330					335	
Tyr	Leu	Glu	Arg	Val	Leu	Lys	Gly	Asp	Val	Glu	Lys	Leu	Ser	Lys	Phe
			340					345					350		
Lys	Ile	Arg	Ile	Glu	Asp	Pro	Pro	Arg	Arg	Lys	His	Met	Val	Phe	Leu
		355					360					365			
Gly	Gly	Ala	Val	Leu	Ala	Asp	Ile	Met	Lys	Asp	Lys	Asp	Asn	Phe	Trp
	370					375					380				
Met	Thr	Arg	Gln	Glu	Tyr	Gln	Glu	Lys	Gly	Val	Arg	Val	Leu	Glu	Lys
385					390					395					400

611

Leu Gly Val Thr Val Arg  
405

<210> 607

<211> 221

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 607

Gly Ser Gly Gly Asn His Ser Val Cys Cys Asp Thr Met Glu Gly Gly  
1 5 10 15

Gly Gly Ser Gly Asn Lys Thr Thr Gly Gly Leu Ala Gly Phe Phe Gly  
20 25 30

Ala Gly Gly Xaa Gly Tyr Ser His Ala Asp Leu Ala Gly Val Pro Leu  
35 40 45

Thr Gly Met Asn Pro Leu Ser Pro Tyr Leu Asn Val Asp Pro Arg Tyr  
50 55 60

Leu Val Gln Asp Thr Asp Glu Phe Ile Leu Pro Thr Gly Ala Asn Lys  
65 70 75 80

Thr Arg Gly Arg Phe Glu Leu Ala Phe Phe Thr Ile Gly Gly Cys Cys  
85 90 95

Met Thr Gly Ala Ala Phe Gly Ala Met Asn Gly Leu Arg Leu Gly Leu  
100 105 110

Lys Glu Thr Gln Asn Met Ala Trp Ser Lys Pro Arg Asn Val Gln Ile  
115 120 125

Leu Asn Met Val Thr Arg Gln Gly Ala Leu Trp Ala Asn Thr Leu Gly  
130 135 140

Ser Leu Ala Leu Leu Tyr Ser Ala Phe Gly Val Ile Ile Glu Lys Thr  
145 150 155 160

Arg Gly Ala Glu Asp Asp Leu Asn Thr Val Ala Ala Gly Thr Met Thr  
165 170 175

Gly Met Leu Tyr Lys Cys Thr Gly Gly Leu Arg Gly Ile Ala Arg Gly

612

	180		185		190										
Gly	Leu	Thr	Gly	Leu	Thr	Leu	Thr	Ser	Leu	Tyr	Ala	Leu	Tyr	Asn	Asn
	195				200						205				
Trp	Glu	His	Met	Lys	Gly	Ser	Leu	Leu	Gln	Gln	Ser	Leu			
	210				215						220				

<210> 608  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

<400> 608  
 Gln Asn Ala Gly Ile Thr Gly Val Ser Tyr His Ala His Leu Phe Ile  
 1 5 10 15  
 Tyr Leu Phe Ile Tyr Leu Phe Leu Arg Leu Arg Phe Lys Lys Lys Thr  
 20 25 30  
 Lys Lys Thr Lys Pro Lys Asn Lys Lys Thr His Gln Leu Asp Ile Leu  
 35 40 45  
 Glu Ala Phe Pro Asp Ser Gly Leu Val Ser Arg Leu Ala Phe Lys Arg  
 50 55 60  
 Lys Ser Cys Pro Tyr Arg Phe Pro Asp Leu Ser Tyr Pro  
 65 70 75

<210> 609  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (39)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 609  
 Pro Thr Glu Thr Gly His Trp Thr Gly Ser Ala Met Arg Leu Leu Pro  
 1 5 10 15  
 Arg Leu Leu Leu Leu Leu Leu Val Phe Pro Ala Thr Val Leu Phe  
 20 25 30  
 Arg Gly Gly Pro Arg Gly Xaa Leu Ala Val Ala Gln Asp Leu Thr Glu

35	40	45																	
Asp	Glu	Glu	Thr	Val	Glu	Asp	Ser	Ile	Ile	Glu	Asp	Glu	Asp	Asp	Glu				
50						55					60								
Ala	Glu	Val	Glu	Glu	Asp	Glu	Pro	Thr	Asp	Leu	Val	Glu	Asp	Lys	Glu				
65					70					75					80				
Glu	Glu	Asp	Val	Ser	Gly	Glu	Pro	Glu	Ala	Ser	Pro	Ser	Ala	Asp	Thr				
				85					90					95					
Thr	Ile	Leu	Phe	Val	Lys	Gly	Glu	Asp	Phe	Pro	Ala	Asn	Asn	Ile	Val				
			100					105					110						
Lys	Phe	Leu	Val	Gly	Phe	Thr	Asn	Lys	Gly	Thr	Glu	Asp	Phe	Ile	Val				
	115						120					125							
Glu	Ser	Leu	Asp	Ala	Ser	Phe	Arg	Tyr	Pro	Gln	Asp	Tyr	Gln	Phe	Tyr				
130						135					140								
Ile	Gln	Asn	Phe	Thr	Ala	Leu	Pro	Leu	Asn	Thr	Val	Val	Pro	Pro	Gln				
145					150					155					160				
Arg	Gln	Ala	Thr	Phe	Glu	Tyr	Ser	Phe	Ile	Pro	Ala	Glu	Pro	Met	Gly				
			165						170					175					
Gly	Arg	Pro	Phe	Gly	Leu	Val	Ile	Asn	Leu	Asn	Tyr	Lys	Asp	Leu	Asn				
			180					185					190						
Gly	Asn	Val	Phe	Gln	Asp	Ala	Val	Phe	Asn	Gln	Thr	Val	Thr	Val	Ile				
	195						200					205							
Glu	Arg	Glu	Asp	Gly	Leu	Asp	Gly	Glu	Thr	Ile	Phe	Met	Tyr	Met	Phe				
210					215						220								
Leu	Ala	Gly	Leu	Gly	Leu	Leu	Val	Ile	Val	Gly	Leu	His	Gln	Leu	Leu				
225					230					235				240					
Glu	Ser	Arg	Lys	Arg	Lys	Arg	Pro	Ile	Gln	Lys	Val	Glu	Met	Gly	Thr				
			245						250					255					
Ser	Ser	Gln	Asn	Asp	Val	Asp	Met	Ser	Trp	Ile	Pro	Gln	Glu	Thr	Leu				
		260					265						270						
Asn	Gln	Ile	Asn	Lys	Ala	Ser	Pro	Arg	Arg	Leu	Pro	Arg	Lys	Arg	Ala				
	275						280					285							
Gln	Lys	Arg	Ser	Val	Gly	Ser	Asp	Glu											
290					295														

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<210> 610
<211> 162
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids
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[illegible]



615

<210> 611  
 <211> 351  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (307)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (335)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 611  
 Glu Met Trp Leu Leu Tyr Leu Leu Val Pro Ala Leu Phe Cys Arg Ala  
           1                  5                  10                  15  
 Gly Gly Ser Ile Pro Ile Pro Gln Lys Leu Phe Gly Glu Val Thr Ser  
                   20                  25                  30  
 Pro Leu Phe Pro Lys Pro Tyr Pro Asn Asn Phe Glu Thr Thr Thr Val  
           35                  40                  45  
 Ile Thr Val Pro Thr Gly Tyr Arg Val Lys Leu Val Phe Gln Gln Phe  
           50                  55                  60  
 Asp Leu Glu Pro Ser Glu Gly Cys Phe Tyr Asp Tyr Val Lys Ile Ser  
           65                  70                  75                  80  
 Ala Asp Lys Lys Ser Leu Gly Arg Phe Cys Gly Gln Leu Gly Ser Pro  
                   85                  90                  95  
 Leu Gly Asn Pro Pro Gly Lys Lys Glu Phe Met Ser Gln Gly Asn Lys  
           100                  105                  110  
 Met Leu Leu Thr Phe His Thr Asp Phe Ser Asn Glu Glu Asn Gly Thr  
           115                  120                  125  
 Ile Met Phe Tyr Lys Gly Phe Leu Ala Tyr Tyr Gln Ala Val Asp Leu  
           130                  135                  140  
 Asp Glu Cys Ala Ser Arg Ser Lys Ser Gly Glu Glu Asp Pro Gln Pro  
           145                  150                  155                  160  
 Gln Cys Gln His Leu Cys His Asn Tyr Val Gly Gly Tyr Phe Cys Ser  
                   165                  170                  175  
 Cys Arg Pro Gly Tyr Glu Leu Gln Glu Asp Arg His Ser Cys Gln Ala

			180					185					190				
Glu	Cys	Ser	Ser	Glu	Leu	Tyr	Thr	Glu	Ala	Ser	Gly	Tyr	Ile	Ser	Ser		
			195			200						205					
Leu	Glu	Tyr	Pro	Arg	Ser	Tyr	Pro	Pro	Asp	Leu	Arg	Cys	Asn	Tyr	Ser		
			210			215						220					
Ile	Arg	Val	Glu	Arg	Gly	Leu	Thr	Leu	His	Leu	Lys	Phe	Leu	Glu	Pro		
225			230						235			240					
Phe	Asp	Ile	Asp	Asp	His	Gln	Gln	Val	His	Cys	Pro	Tyr	Asp	Gln	Leu		
			245						250			255					
Gln	Ile	Tyr	Ala	Asn	Gly	Lys	Asn	Ile	Gly	Glu	Phe	Cys	Gly	Lys	Gln		
			260						265			270					
Arg	Pro	Pro	Asp	Leu	Asp	Thr	Ser	Ser	Asn	Ala	Val	Asp	Leu	Leu	Phe		
			275			280						285					
Phe	Thr	Asp	Glu	Ser	Gly	Asp	Ser	Arg	Gly	Trp	Lys	Leu	Arg	Tyr	Thr		
290						295						300					
Thr	Glu	Xaa	His	Gln	Val	Pro	Pro	Ala	Gln	Asp	Pro	Arg	Arg	Ser	Ser		
305			310						315			320					
Pro	Ser	Ser	Arg	Thr	Cys	Ser	Leu	Gln	Leu	Pro	Ser	Phe	Arg	Xaa	Leu		
			325						330			335					
Ile	Cys	Ile	Cys	Phe	Thr	Trp	Gln	Gly	Lys	Ala	Tyr	Pro	Val	Pro			
			340						345			350					

$\langle 210 \rangle$  612

<211> 449

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

**<220>**

<221> SITE

$\langle 222 \rangle$  (284)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 612

Ile Tyr Ala Asn Gly Lys Asn Ile Gly Glu Phe Cys Gly Lys Gln Arg

617

1	5	10	15
Xaa Pro Asp	Leu Asp Thr Ser Ser Asn	Ala Val Asp Leu Leu Phe Phe	
	20	25	30
Thr Asp Glu	Ser Gly Asp Ser Arg Gly Trp Lys Leu Arg Tyr Thr Thr		
	35	40	45
Glu Ile Ile	Lys Cys Pro Gln Pro Lys Thr Leu Asp Glu Phe Thr Ile		
	50	55	60
Ile Gln Asn	Leu Gln Pro Gln Tyr Gln Phe Arg Asp Tyr Phe Ile Ala		
	65	70	75
Thr Cys Lys	Gln Gly Tyr Gln Leu Ile Glu Gly Asn Gln Val Leu His		
	85	90	95
Ser Phe Thr	Ala Val Cys Gln Asp Asp Gly Thr Trp His Arg Ala Met		
	100	105	110
Pro Arg Cys	Lys Ile Lys Asp Cys Gly Gln Pro Arg Asn Leu Pro Asn		
	115	120	125
Gly Asp Phe	Arg Tyr Thr Thr Thr Met Gly Val Asn Thr Tyr Lys Ala		
	130	135	140
Arg Ile Gln	Tyr Tyr Cys His Glu Pro Tyr Tyr Lys Met Gln Thr Arg		
	145	150	155
Ala Gly Ser	Arg Glu Ser Glu Gln Gly Val Tyr Thr Cys Thr Ala Gln		
	165	170	175
Gly Ile Trp	Lys Asn Glu Gln Lys Gly Glu Lys Ile Pro Arg Cys Leu		
	180	185	190
Pro Val Cys	Gly Lys Pro Val Asn Pro Val Glu Gln Arg Gln Arg Ile		
	195	200	205
Ile Gly Gly	Gln Lys Ala Lys Met Gly Asn Phe Pro Trp Gln Val Phe		
	210	215	220
Thr Asn Ile	His Gly Arg Gly Gly Gly Ala Leu Leu Gly Asp Arg Trp		
	225	230	235
Ile Leu Thr	Ala Ala His Thr Leu Tyr Pro Lys Glu His Glu Ala Gln		
	245	250	255
Ser Asn Ala	Ser Leu Asp Val Phe Leu Gly His Thr Asn Val Glu Glu		
	260	265	270
Leu Met Lys	Leu Gly Asn His Pro Ile Arg Arg Xaa Ser Val His Pro		

618

275		280		285
Asp Tyr Arg Gln Asp Glu Ser Tyr Asn Phe Glu Gly Asp Ile Ala Leu				
290		295		300
Leu Glu Leu Glu Asn Ser Val Thr Leu Gly Pro Asn Leu Leu Pro Ile				
305		310		315 320
Cys Leu Pro Asp Asn Asp Thr Phe Tyr Asp Leu Gly Leu Met Gly Tyr				
	325		330	335
Val Ser Gly Phe Gly Val Met Glu Glu Lys Ile Ala His Asp Leu Arg				
	340		345	350
Phe Val Arg Leu Pro Val Ala Asn Pro Gln Ala Cys Glu Asn Trp Leu				
	355		360	365
Arg Gly Lys Asn Arg Met Asp Val Phe Ser Gln Asn Met Phe Cys Ala				
	370		375	380
Gly His Pro Ser Leu Lys Gln Asp Ala Cys Gln Gly Asp Ser Gly Gly				
385		390		395 400
Val Phe Ala Val Arg Asp Pro Asn Thr Asp Arg Trp Val Ala Thr Gly				
	405		410	415
Ile Val Ser Trp Gly Ile Gly Cys Ser Arg Gly Tyr Gly Phe Tyr Thr				
	420		425	430
Lys Val Leu Asn Tyr Val Asp Trp Ile Lys Lys Glu Met Glu Glu Glu				
	435		440	445

Asp

&lt;210&gt; 613

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

619

&lt;400&gt; 613

```

Asp Pro Lys Tyr Arg Lys Trp Ala Trp Glu Ala Val Glu Ala Leu Glu
 1             5             10             15

Asn His Cys Arg Val Asn Gly Gly Tyr Ser Gly Leu Arg Asp Val Tyr
      20             25             30

Leu Leu His Glu Ser Tyr Asp Asp Val Gln Gln Ser Phe Phe Leu Ala
      35             40             45

Glu Thr Leu Lys Tyr Leu Tyr Leu Ile Phe Ser Asp Xaa Asp Xaa Leu
      50             55             60

Pro Leu Glu His Trp Ile Phe Asn Ser Glu Ala His Leu Leu Pro Ile
      65             70             75             80

Leu Pro Lys Asp Lys Lys Glu Val Glu Ile Arg Glu Glu
      85             90

```

&lt;210&gt; 614

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (208)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (229)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 614

```

Ser Leu Asn Pro Met Glu Lys Thr Gln Glu Thr Val Gln Arg Ile Leu
 1             5             10             15

Leu Glu Pro Tyr Lys Tyr Leu Leu Gln Leu Pro Gly Lys Gln Val Arg
      20             25             30

Thr Lys Leu Ser Gln Ala Phe Asn His Trp Leu Lys Val Pro Glu Asp
      35             40             45

Lys Leu Gln Ile Ile Ile Glu Val Thr Glu Met Leu His Asn Ala Ser
      50             55             60

Leu Leu Ile Asp Asp Ile Glu Asp Asn Ser Lys Leu Arg Arg Gly Phe

```

620

65					70						75				80
Pro	Val	Ala	His	Ser	Ile	Tyr	Gly	Ile	Pro	Ser	Val	Ile	Asn	Ser	Ala
				85					90					95	
Asn	Tyr	Val	Tyr	Phe	Leu	Gly	Leu	Glu	Lys	Val	Leu	Thr	Leu	Asp	His
			100					105					110		
Pro	Asp	Ala	Val	Lys	Leu	Phe	Thr	Arg	Gln	Leu	Leu	Glu	Leu	His	Gln
		115					120					125			
Gly	Gln	Gly	Leu	Asp	Ile	Tyr	Trp	Arg	Asp	Asn	Tyr	Thr	Cys	Pro	Thr
	130					135					140				
Glu	Glu	Glu	Tyr	Lys	Ala	Met	Val	Leu	Gln	Lys	Thr	Gly	Gly	Leu	Phe
145					150					155					160
Gly	Leu	Ala	Val	Gly	Leu	Met	Gln	Leu	Phe	Ser	Asp	Tyr	Lys	Glu	Asp
				165					170					175	
Leu	Lys	Pro	Leu	Leu	Asn	Thr	Leu	Gly	Leu	Phe	Phe	Gln	Ile	Arg	Asp
			180					185					190		
Asp	Tyr	Ala	Asn	Leu	His	Ser	Lys	Glu	Tyr	Ser	Glu	Asn	Lys	Ser	Xaa
		195					200					205			
Cys	Glu	Asp	Leu	Thr	Glu	Gly	Lys	Phe	Ser	Phe	Pro	Thr	Ile	His	Ala
	210					215					220				
Ile	Trp	Ser	Arg	Xaa	Glu	Ser	Thr	Gln	Val	Gln	Asn	Ile	Leu	Arg	Gln
225					230					235					240
Arg	Thr	Glu	Asn	Ile	Asp	Ile	Lys	Lys	Tyr	Cys	Val	His	Tyr	Leu	Glu
			245						250					255	
Asp	Val	Gly	Ser	Phe	Glu	Tyr	Thr	Arg	Asn	Thr	Leu	Lys	Glu	Leu	Glu
			260					265					270		
Ala	Lys	Ala	Tyr	Lys	Gln	Ile	Asp	Ala	Arg	Gly	Gly	Asn	Pro	Glu	Leu
		275					280					285			
Val	Ala	Leu	Val	Lys	His	Leu	Ser	Lys	Met	Phe	Lys	Glu	Glu	Asn	Glu
	290					295					300				

&lt;210&gt; 615

&lt;211&gt; 171

621

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 615

Ser Cys Gly Pro Arg Gly Leu Ala Ser Leu Gly Leu Gly Phe Ser Gly  
 1 5 10 15

Arg Cys Asp Asp Gln Asn Lys Gly Arg Ser Arg Arg Ala Arg Gly Ser  
 20 25 30

Gly Gly Gly Val Phe Arg Gly Ala His Leu Pro Gly Ala Ala Gly Gln  
 35 40 45

Pro Glu Pro His Arg Ala Xaa Leu Ala Ser Arg Arg Leu Thr Arg Lys  
 50 55 60

Leu Tyr Lys Cys Ile Lys Lys Ala Val Lys Gln Lys Gln Ile Arg Arg  
 65 70 75 80

Gly Val Lys Glu Val Gln Lys Phe Val Asn Lys Gly Glu Lys Gly Ile  
 85 90 95

Met Val Leu Ala Gly Asp Thr Leu Pro Ile Glu Val Tyr Cys His Leu  
 100 105 110

Pro Val Met Cys Glu Asp Arg Asn Leu Pro Tyr Val Tyr Ile Pro Ser  
 115 120 125

Lys Thr Asp Leu Gly Ala Ala Ala Pro Lys Arg Pro Thr Cys Val  
 130 135 140

Ile Met Val Lys Pro His Glu Glu Tyr Gln Glu Ala Tyr Asp Glu Cys  
 145 150 155 160

Leu Glu Glu Val Gln Ser Leu Pro Leu Pro Leu  
 165 170

&lt;210&gt; 616

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 616

Phe Asn Ile Pro Leu His Gln Ile Asn Gln Val Tyr Arg Gln Gly Pro

622

1                      5                      10                      15  
 Thr Gly Ile His Ile Leu Val Ser Asp Gln Met Val Gln Asn Phe Gln  
                          20                      25                      30  
 Asp Glu Ser Cys Phe Leu Phe Ser Thr Val Lys Ala Glu Ser Ser Asp  
                          35                      40                      45  
 Gly Ile His Ile Ile Leu Lys  
                          50                      55

&lt;210&gt; 617

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 617

Gly Val Arg Leu Arg Glu Asp Asp Arg Arg Val Trp Ser Thr Gly Pro  
   1                      5                      10                      15  
 Pro Arg Val Trp Gly Ala Asp Arg Ser Thr Leu Arg Ala Val Met Ser  
                          20                      25                      30  
 Ala Ser Val Val Ser Val Ile Ser Arg Phe Leu Glu Glu Tyr Leu Ser  
                          35                      40                      45  
 Ser Thr Pro Gln Arg Leu Lys Leu Leu Asp Ala Tyr Leu Leu Tyr Ile  
                          50                      55                      60  
 Leu Leu Thr Gly Ala Leu Gln Phe Gly Tyr Cys Leu Leu Val Gly Thr  
   65                      70                      75                      80  
 Phe Pro Phe Asn Ser Phe Leu Ser Gly Phe Ile Ser Cys Val Gly Ser  
                          85                      90                      95  
 Phe Ile Leu Ala Val Cys Leu Arg Ile Gln Ile Asn Pro Gln Asn Lys  
                          100                      105                      110  
 Ala Asp Phe Gln Gly Ile Ser Pro Glu Arg Ala Phe Ala Asp Phe Leu  
                          115                      120                      125  
 Phe Ala Ser Thr Ile Leu His Leu Val Val Met Asn Phe Val Gly  
                          130                      135                      140

&lt;210&gt; 618

&lt;211&gt; 376

&lt;212&gt; PRT



623

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 618

Ala	Ala	Gly	Asp	Arg	Asp	Cys	Arg	Pro	Ala	Ser	Gly	Gly	Asn	Pro	Ser
1				5					10					15	
Val	Ile	Arg	Lys	Xaa	Tyr	Asn	Leu	Thr	Ser	Gln	Asp	Val	Gly	Ser	Gly
			20					25					30		
Thr	Ser	Asn	Asn	Ser	Gln	Ala	Cys	Ala	Gln	Phe	Leu	Glu	Gln	Tyr	Phe
		35					40					45			
His	Asp	Ser	Asp	Leu	Ala	Gln	Phe	Met	Arg	Leu	Phe	Gly	Gly	Asn	Phe
	50					55					60				
Ala	His	Gln	Ala	Ser	Val	Ala	Arg	Val	Val	Gly	Gln	Gln	Gly	Arg	Gly
65					70					75					80
Arg	Ala	Gly	Ile	Glu	Ala	Ser	Leu	Asp	Val	Gln	Tyr	Leu	Met	Ser	Ala
				85					90					95	
Gly	Ala	Asn	Ile	Ser	Thr	Trp	Val	Tyr	Ser	Ser	Pro	Gly	Arg	His	Glu
		100						105					110		
Gly	Gln	Glu	Pro	Phe	Leu	Gln	Trp	Leu	Met	Leu	Leu	Ser	Asn	Glu	Ser
		115					120					125			
Ala	Leu	Pro	His	Val	His	Thr	Val	Ser	Tyr	Gly	Asp	Asp	Glu	Asp	Ser
	130					135					140				
Leu	Ser	Ser	Ala	Tyr	Ile	Gln	Arg	Val	Asn	Thr	Glu	Leu	Met	Lys	Ala
145					150					155					160
Ala	Ala	Arg	Gly	Leu	Thr	Leu	Leu	Phe	Ala	Ser	Gly	Asp	Ser	Gly	Ala
				165					170					175	
Gly	Cys	Trp	Ser	Val	Ser	Gly	Arg	His	Gln	Phe	Arg	Pro	Thr	Phe	Pro
			180					185					190		
Ala	Ser	Ser	Pro	Tyr	Val	Thr	Thr	Val	Gly	Gly	Thr	Ser	Phe	Gln	Glu
		195					200					205			
Pro	Phe	Leu	Ile	Thr	Asn	Glu	Ile	Val	Asp	Tyr	Ile	Ser	Gly	Gly	Gly
	210					215					220				
Phe	Ser	Asn	Val	Phe	Pro	Arg	Pro	Ser	Tyr	Gln	Glu	Glu	Ala	Val	Thr

624

225				230				235				240			
Lys	Phe	Leu	Ser	Ser	Ser	Pro	His	Leu	Pro	Pro	Ser	Ser	Tyr	Phe	Asn
				245				250				255			
Ala	Ser	Gly	Arg	Ala	Tyr	Pro	Asp	Val	Ala	Ala	Leu	Ser	Asp	Gly	Tyr
				260				265				270			
Trp	Val	Val	Ser	Asn	Arg	Val	Pro	Ile	Pro	Trp	Val	Ser	Gly	Thr	Ser
				275				280				285			
Ala	Ser	Thr	Pro	Val	Phe	Gly	Gly	Ile	Leu	Ser	Leu	Ile	Asn	Glu	His
				290				295				300			
Arg	Ile	Leu	Ser	Gly	Arg	Pro	Pro	Leu	Gly	Phe	Leu	Asn	Pro	Arg	Leu
305				310				315				320			
Tyr	Gln	Gln	His	Gly	Ala	Gly	Leu	Phe	Asp	Val	Thr	Arg	Gly	Cys	His
				325				330				335			
Glu	Ser	Cys	Leu	Asp	Glu	Glu	Val	Glu	Gly	Gln	Gly	Phe	Cys	Ser	Gly
				340				345				350			
Pro	Gly	Trp	Asp	Pro	Val	Thr	Gly	Trp	Gly	Thr	Pro	Asn	Phe	Pro	Ala
				355				360				365			
Leu	Leu	Lys	Thr	Leu	Leu	Asn	Pro								
370				375											

<210> 619

<211> 241

<212> PRT

<213> Homo sapiens

 $\langle 220 \rangle$ 

<221> SITE

 $\langle 222 \rangle$  (214)

<223> Xaa equals any of the naturally occurring L-amino acids

$\langle 220 \rangle$

&lt;221&gt; SITE

 $\langle 222 \rangle$  (220)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 619

Arg Gly Gly Gly Ser Pro Gly Val Arg Ser Ala Asp Thr Pro Gly His  
1 5 10 15

Arg Ala Pro Gly His Arg Ala Ala Gly Pro Ser Pro Gln Ser Asn Ala

625

[illegible]

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<210> 620
<211> 305
<212> PRT
<213> Homo sapiens
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626

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (216)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 620

Thr	Phe	Asn	Glu	Arg	Ser	Gly	Arg	Ile	Glu	Arg	Ser	Asn	Arg	Ser	Leu
1				5					10					15	

Pro	Cys	Ala	Xaa	Leu	Glu	Asp	Asn	Leu	Phe	Glu	Trp	His	Phe	Thr	Val
			20					25					30		

Arg	Gly	Pro	Pro	Asp	Ser	Asp	Phe	Asp	Gly	Gly	Val	Tyr	His	Gly	Arg
		35					40					45			

Ile	Val	Leu	Pro	Pro	Glu	Tyr	Pro	Met	Lys	Pro	Pro	Ser	Ile	Ile	Leu
	50					55						60			

Leu	Thr	Ala	Asn	Gly	Arg	Phe	Glu	Val	Gly	Lys	Lys	Ile	Cys	Leu	Ser
65					70					75					80

Ile	Ser	Gly	His	His	Pro	Glu	Thr	Trp	Gln	Pro	Ser	Trp	Ser	Ile	Arg
				85					90					95	

Thr	Ala	Leu	Leu	Ala	Ile	Ile	Gly	Phe	Met	Pro	Thr	Lys	Gly	Glu	Gly
		100						105					110		

Ala	Ile	Gly	Ser	Leu	Asp	Tyr	Thr	Pro	Glu	Glu	Arg	Arg	Ala	Leu	Ala
		115					120					125			

Lys	Lys	Ser	Gln	Asp	Phe	Cys	Cys	Glu	Gly	Cys	Gly	Ser	Ala	Met	Lys
	130					135					140				

Asp	Val	Leu	Leu	Pro	Leu	Lys	Ser	Gly	Ser	Asp	Ser	Ser	Gln	Ala	Asp
145					150					155					160

Gln	Glu	Ala	Lys	Glu	Leu	Ala	Arg	Gln	Ile	Ser	Phe	Lys	Ala	Glu	Val
			165					170						175	

Asn	Ser	Ser	Gly	Lys	Thr	Ile	Ser	Glu	Ser	Asp	Leu	Asn	His	Ser	Phe
			180					185					190		

Ser	Leu	Thr	Asp	Leu	Gln	Asp	Asp	Ile	Pro	Thr	Thr	Phe	Gln	Gly	Ala
		195					200						205		

Thr	Ala	Ser	Thr	Ser	Tyr	Gly	Xaa	Gln	Asn	Ser	Ser	Ala	Ala	Ser	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

627

210                      215                      220  
 His Gln Pro Thr Gln Pro Val Ala Lys Asn Thr Ser Met Ser Pro Arg  
 225                      230                      235                      240  
 Gln Arg Arg Ala Gln Gln Gln Ser Gln Arg Arg Leu Ser Thr Ser Pro  
                     245                      250                      255  
 Asp Val Ile Gln Gly His Gln Pro Arg Asp Asn His Thr Asp His Gly  
                     260                      265                      270  
 Gly Ser Ala Val Leu Ile Val Ile Leu Thr Leu Ala Leu Ala Ala Leu  
                     275                      280                      285  
 Ile Phe Arg Arg Ile Tyr Leu Ala Asn Glu Tyr Ile Phe Asp Phe Glu  
                     290                      295                      300  
 Leu  
 305

<210> 621  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 621  
 Asp Pro Arg Asp Ser Arg Ser Gly Leu Gly Arg Leu Xaa Gly Pro Trp  
   1                      5                      10                      15  
 Gln Glu Ala Gly Ser Ser Arg Gly Pro Ser Ser Gly Asp Met Ala Gly  
                     20                      25                      30  
 Val Lys Ala Leu Val Ala Leu Ser Phe Ser Gly Ala Ile Gly Leu Thr  
                     35                      40                      45  
 Phe Leu Met Leu Gly Cys Ala Leu Glu Asp Tyr Gly Val Tyr Trp Pro  
                     50                      55                      60  
 Leu Phe Val Leu Ile Phe His Ala Ile Ser Pro Ile Pro His Phe Ile  
                     65                      70                      75                      80  
 Ala Lys Arg Val Thr Tyr Asp Ser Asp Ala Thr Ser Ser Ala Cys Arg  
                     85                      90                      95

628

Glu Leu Ala Tyr Phe Phe Thr Thr Gly Ile Val Val Ser Ala Phe Gly  
                   100                  105                  110  
 Phe Pro Val Ile Leu Ala Arg Val Ala Val Ile Lys Trp Gly Ala Cys  
                   115                  120                  125  
 Gly Leu Val Leu Ala Gly Asn Ala Val Ile Phe Leu Thr Ile Gln Gly  
                   130                  135                  140  
 Phe Phe Leu Ile Phe Gly Arg Gly Asp Asp Phe Ser Trp Glu Gln Trp  
                   145                  150                  155                  160

<210> 622  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 622  
 Pro Cys Cys Leu Val Glu Thr Arg Thr Ile Asp Leu Asn Ile Ala Met  
   1                  5                  10                  15  
 Val Leu Leu Gln Ser Trp Gln Thr Ala Val Thr Leu Pro Arg Gly Gln  
                   20                  25                  30  
 Arg Val Leu Ile Leu Cys Gln Gln Arg Cys Thr Thr Ile Thr Met Val  
                   35                  40                  45  
 Val Thr Tyr Arg Lys Ile Arg Val Ala Pro Ala Ser Cys Met Asp Arg  
                   50                  55                  60  
 Pro Gly Leu Leu Leu Pro Lys Asp Leu Asp Ile His Lys Asp Thr Gly  
                   65                  70                  75                  80  
 Asp Ile Leu Ala His Gln Leu Ala Glu Ala Glu Ala Glu Gly Tyr His  
                   85                  90                  95  
 Thr Glu Tyr Leu Phe Phe Leu Arg His Ile Ile Phe Ile Trp Lys Asp  
                   100                  105                  110  
 Phe Ser Ser Cys Asn Leu Arg Gln Gln Ser Lys Arg Leu Glu  
                   115                  120                  125

<210> 623  
 <211> 108

629

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 623

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Thr Glu Cys Ser Gly Ser Leu Asn His Cys Phe Ser Phe Glu Ser Arg
 1              5              10              15

Ala Ser Cys His Phe His Val Ala Ser Ala Val Ser Pro Pro Thr Pro
          20              25              30

Leu Cys Ser Pro Ala Thr Leu Met Ala Gln Asp Lys Ala Gly Lys Pro
          35              40              45

Ser Gln Lys His Leu Trp Pro Arg Lys Pro Leu Ser Pro Ser Leu Ser
          50              55              60

His Glu Ala Gln Pro Ser Gln Ala Leu Met Leu Ser Gln Trp Ala Ser
          65              70              75              80

His Arg Ala Lys Glu Gly Leu Phe Ser Val Pro Ser Leu Trp Val Arg
          85              90              95

Thr Arg Gly His Ala Glu Cys Pro Leu Leu Thr Trp
          100              105

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&lt;210&gt; 624

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 624

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Leu Trp Lys Ser Arg Leu Thr Phe Lys Leu Ala Met Ser Arg Val Pro
 1              5              10              15

Ser Pro Pro Pro Pro Ala Glu Met Ser Ser Gly Pro Val Ala Glu Ser
          20              25              30

Trp Cys Tyr Thr Gln Ile Lys Val Val Lys Phe Ser Tyr Met Trp Thr
          35              40              45

Ile Asn Asn Phe Ser Phe Cys Arg Glu Glu Met Gly Glu Val Ile Lys
          50              55              60

Ser Ser Thr Phe Ser Ser Gly Ala Asn Asp Lys Leu Lys Trp Cys Leu
          65              70              75              80

Arg Val Asn Pro Lys Gly Leu Asp Glu Glu Ser Lys Asp Tyr Leu Ser
          85              90              95

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Ser Ala Gln Cys Pro Phe Leu Gly Pro Pro Arg Lys Arg Leu Lys Gln  
 370 375 380

Ser  
 385

<210> 625

<211> 390

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (157)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 625

Leu Glu Arg Glu Arg Leu Glu Gln Glu Gln Leu Glu Arg Glu Arg Gln  
 1 5 10 15

Glu Arg Glu Arg Gln Glu Arg Leu Glu Arg Gln Glu Arg Leu Glu Arg  
 20 25 30

Gln Glu Arg Leu Glu Arg Gln Glu Arg Leu Asp Arg Glu Arg Gln Glu  
 35 40 45

Arg Gln Glu Arg Glu Arg Leu Glu Arg Leu Glu Arg Glu Arg Gln Glu  
 50 55 60

Arg Glu Arg Gln Glu Gln Leu Glu Arg Glu Gln Leu Glu Trp Glu Arg  
 65 70 75 80

Glu Arg Arg Ile Ser Ser Ala Ala Ala Pro Ala Ser Val Glu Thr Pro  
 85 90 95

Leu Asn Ser Val Leu Gly Asp Ser Ser Ala Ser Glu Pro Gly Leu Gln  
 100 105 110

Ala Ala Ser Gln Pro Ala Glu Thr Pro Ser Gln Xaa Gly Ile Val Leu

115	120	125
Gly Xaa Leu Ala Pro Pro Pro Pro Pro Pro Leu Pro Pro Gly Pro Ala		
130	135	140
Gln Ala Ser Val Ala Leu Pro Pro Pro Pro Glu Lys Xaa Ser Thr Ser		
145	150	155 160
Ser Thr Pro Ile His Arg Ala Ser Thr Ala Pro Pro Pro Pro Pro Leu		
	165	170 175
Pro Asn Gln Val Pro Pro Pro Pro Pro Pro Pro Ala Pro Pro Leu		
	180	185 190
Pro Ala Ser Gly Phe Phe Leu Ala Ser Met Ser Glu Asp Asn Arg Pro		
	195	200 205
Leu Thr Gly Leu Ala Ala Ala Ile Ala Gly Ala Lys Leu Arg Lys Val		
	210	215 220
Ser Arg Met Glu Asp Thr Ser Phe Pro Ser Gly Gly Asn Ala Ile Gly		
225	230	235 240
Val Asn Ser Ala Ser Ser Lys Thr Asp Thr Gly Arg Gly Asn Gly Pro		
	245	250 255
Leu Pro Leu Gly Gly Ser Gly Leu Met Glu Glu Met Ser Ala Leu Leu		
	260	265 270
Ala Arg Arg Arg Arg Ile Ala Glu Lys Gly Ser Thr Ile Glu Thr Glu		
	275	280 285
Gln Lys Glu Asp Lys Gly Glu Asp Ser Glu Pro Val Thr Ser Lys Ala		
	290	295 300
Ser Ser Thr Ser Thr Pro Glu Pro Thr Arg Lys Pro Trp Glu Arg Thr		
305	310	315 320
Asn Thr Met Asn Gly Ser Lys Ser Pro Val Ile Ser Arg Pro Lys Ser		
	325	330 335
Thr Pro Leu Ser Gln Pro Ser Ala Asn Gly Val Gln Thr Glu Gly Leu		
	340	345 350
Asp Tyr Asp Arg Leu Lys Gln Asp Ile Leu Asp Glu Met Arg Lys Glu		
	355	360 365
Leu Thr Lys Leu Lys Glu Glu Leu Ile Asp Ala Ile Arg Gln Glu Leu		
	370	375 380
Ser Lys Ser Asn Thr Ala		

633

385

390

&lt;210&gt; 626

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 626

Ser Phe Gly Ala Leu Val Arg Asp Gly Asn Pro Ala Asn Val Ser Arg  
1 5 10 15

Glu Leu Ser Leu Trp Gln Ala Leu Pro Ser Thr Leu Cys Ile Leu Tyr  
20 25 30

Phe Leu Arg Leu Leu Pro Asp Arg Ser Glu Met Ala Glu Val Glu Glu  
35 40 45

Thr Leu Lys Arg Leu Gln Ser Gln Lys Gly Val Gln Gly Ile Ile Val  
50 55 60

Val Asn Thr Glu Gly Ile Pro Ile Lys Ser Thr Met Asp Asn Pro Thr  
65 70 75 80

Thr Thr Gln Tyr Ala Ser Leu Met His Ser Phe Ile Leu Lys Ala Arg  
85 90 95

Ser Thr Val Arg Asp Ile Asp Pro Gln Asn Asp Leu Thr Phe Leu Arg  
100 105 110

Ile Arg Ser Lys Lys Asn Glu Ile Met Val Ala Pro Asp Lys Asp Tyr  
115 120 125

Phe Leu Ile Val Ile Gln Asn Pro Thr Glu  
130 135

&lt;210&gt; 627

&lt;211&gt; 469

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (139)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 627

Gln Gly Phe Gly Arg Pro Ser Val Tyr His Ala Ala Ile Val Ile Phe

634

1	5	10	15
Leu Glu Phe Phe Ala Trp Gly Leu Leu Thr Thr Pro Met Leu Thr Val	20	25	30
Leu His Glu Thr Phe Ser Gln His Thr Phe Leu Met Asn Gly Leu Ile	35	40	45
Gln Gly Val Lys Gly Leu Leu Ser Phe Leu Ser Ala Pro Leu Ile Gly	50	55	60
Ala Leu Ser Asp Val Trp Gly Arg Lys Pro Phe Leu Leu Gly Thr Val	65	70	75
Phe Phe Thr Cys Phe Pro Ile Pro Leu Met Arg Ile Ser Pro Trp Trp	85	90	95
Tyr Phe Ala Met Ile Ser Val Ser Gly Val Phe Ser Val Thr Phe Ser	100	105	110
Val Ile Phe Ala Tyr Val Ala Asp Val Thr Gln Glu His Glu Arg Ser	115	120	125
Thr Ala Tyr Gly Trp Val Ser Ala Thr Phe Xaa Ala Ser Leu Val Ser	130	135	140
Ser Pro Ala Ile Gly Ala Tyr Leu Ser Ala Ser Tyr Gly Asp Ser Leu	145	150	155
Val Val Leu Val Ala Thr Val Val Ala Leu Leu Asp Ile Cys Phe Ile	165	170	175
Leu Val Ala Val Pro Glu Ser Leu Pro Glu Lys Met Arg Pro Val Ser	180	185	190
Trp Gly Ala Gln Ile Ser Trp Lys Gln Ala Asp Pro Phe Ala Ser Leu	195	200	205
Lys Lys Val Gly Lys Asp Ser Thr Val Leu Leu Ile Cys Ile Thr Val	210	215	220
Phe Leu Ser Tyr Leu Pro Glu Ala Gly Gln Tyr Ser Ser Phe Phe Leu	225	230	235
Tyr Leu Arg Gln Val Ile Gly Phe Gly Ser Val Lys Ile Ala Ala Phe	245	250	255
Ile Ala Met Val Gly Ile Leu Ser Ile Val Ala Gln Thr Ala Phe Leu	260	265	270
Ser Ile Leu Met Arg Ser Leu Gly Asn Lys Asn Thr Val Leu Leu Gly			

635

275                      280                      285  
 Leu Gly Phe Gln Met Leu Gln Leu Ala Trp Tyr Gly Phe Gly Ser Gln  
     290                      295                      300  
 Ala Trp Met Met Trp Ala Ala Gly Thr Val Ala Ala Met Ser Ser Ile  
 305                      310                      315                      320  
 Thr Phe Pro Ala Ile Ser Ala Leu Val Ser Arg Asn Ala Glu Ser Asp  
                     325                      330                      335  
 Gln Gln Gly Val Ala Gln Gly Ile Ile Thr Gly Ile Arg Gly Leu Cys  
                     340                      345                      350  
 Asn Gly Leu Gly Pro Ala Leu Tyr Gly Phe Ile Phe Tyr Met Phe His  
                     355                      360                      365  
 Val Glu Leu Thr Glu Leu Gly Pro Lys Leu Asn Ser Asn Asn Val Pro  
                     370                      375                      380  
 Leu Gln Gly Ala Val Ile Pro Gly Pro Pro Phe Leu Phe Gly Ala Cys  
 385                      390                      395                      400  
 Ile Val Leu Met Ser Phe Leu Val Ala Leu Phe Ile Pro Glu Tyr Ser  
                     405                      410                      415  
 Lys Ala Ser Gly Val Gln Lys His Ser Asn Ser Ser Ser Gly Ser Leu  
                     420                      425                      430  
 Thr Asn Thr Pro Glu Arg Gly Ser Asp Glu Asp Ile Glu Pro Leu Leu  
                     435                      440                      445  
 Gln Asp Ser Ser Ile Trp Glu Leu Ser Ser Phe Glu Glu Pro Gly Asn  
                     450                      455                      460  
 Gln Cys Thr Glu Leu  
 465

&lt;210&gt; 628

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 628

Asn Tyr Ile Pro Glu Val Arg Ile Met Ser Ile Pro Asn Leu Arg Tyr  
     1                      5                      10                      15

Met Lys Glu Ser Gln Val Leu Leu Thr Leu Thr Asn Pro Val Glu Asn  
                     20                      25                      30

636

Leu Thr His Val Thr Leu Phe Glu Cys Glu Glu Gly Asp Pro Asp Asp  
                   35                                  40                                  45  
 Ile Asn Ser Thr Ala Lys Val Val Val Pro Pro Lys Glu Leu Val Leu  
                   50                                  55                                  60  
 Ala Gly Lys Asp Ala Ala Ala Glu Tyr Asp Glu Leu Ala Glu Pro Gln  
                   65                                  70                                  75                                  80  
 Asp Phe Gln Asp Asp Pro Asp Ile Ile Ala Phe Arg Lys Ala Asn Lys  
                                   85                                  90                                  95  
 Val Gly Ile Phe Ile Lys Val Thr Pro Gln Arg Glu Glu Gly Glu Val  
                                   100                                  105                                  110  
 Thr Val Cys Phe Lys Met Lys His Asp Phe Lys Asn Leu Ala Ala Pro  
                   115                                  120                                  125  
 Ile Arg Pro Ile Glu Glu Ser Asp Gln Gly Thr Glu Val Ile Trp Leu  
                   130                                  135                                  140  
 Thr Gln His Val Glu Leu Ser Leu Gly Pro Leu Leu Pro  
                   145                                  150                                  155

&lt;210&gt; 629

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 629

Arg Met Thr Ser Arg Lys Lys Val Leu Leu Lys Val Ile Ile Leu Gly  
           1                                  5                                  10                                  15  
 Asp Ser Gly Val Gly Lys Thr Ser Leu Met Asn Gln Tyr Val Asn Lys  
                   20                                  25                                  30  
 Lys Phe Ser Asn Gln Tyr Lys Ala Thr Ile Gly Ala Asp Phe Leu Thr  
                   35                                  40                                  45  
 Lys Glu Val Met Val Asp Asp Arg Leu Val Thr Met Gln Ile Trp Asp  
                   50                                  55                                  60  
 Thr Ala Gly Gln Glu Arg Phe Gln Ser Leu Gly Val Ala Phe Tyr Arg  
                   65                                  70                                  75                                  80  
 Gly Ala Asp Cys Cys Val Leu Val Phe Asp Val Thr Ala Pro Asn Thr  
                                   85                                  90                                  95

637

Phe Lys Thr Leu Asp Ser Trp Arg Asp Glu Phe Leu Ile Gln Ala Ser  
 100 105 110  
 Pro Arg Asp Pro Glu Asn Phe Pro Phe Val Val Leu Gly Asn Lys Ile  
 115 120 125  
 Asp Leu Glu Asn Arg Gln Val Ala Thr Lys Arg Ala Gln Ala Trp Cys  
 130 135 140  
 Tyr Ser Lys Asn Asn Ile Pro Tyr Phe Glu Thr Ser Ala Lys Glu Ala  
 145 150 155 160  
 Ile Asn Val Glu Gln Ala Phe Gln Thr Ile Ala Arg Asn Ala Leu Lys  
 165 170 175  
 Gln Glu Thr Glu Val Glu Leu Tyr Asn Glu Phe Pro Glu Pro Ile Lys  
 180 185 190  
 Leu Asp Lys Asn Asp Arg Ala Lys Ala Ser Ala Glu Ser Cys Ser Cys  
 195 200 205

<210> 630  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 630  
 Thr Ala Met Ser Ser Glu Glu Gly Lys Leu Phe Val Gly Gly Leu Asn  
 1 5 10 15  
 Phe Asn Thr Asp Glu Gln Ala Leu Glu Asp His Phe Ser Ser Phe Gly  
 20 25 30  
 Pro Ile Ser Glu Val Val Val Val Lys Asp Arg Glu Thr Gln Arg Ser  
 35 40 45  
 Arg Gly Phe Gly Phe Ile Thr Phe Thr Asn Pro Glu His Ala Ser Val  
 50 55 60  
 Ala Met Arg Ala Met Asn Gly Glu Ser Leu Asp Gly Arg Gln Ile Arg  
 65 70 75 80  
 Val Asp His Ala Gly Lys Ser Ala Arg Gly Thr Arg Gly Gly Gly Phe  
 85 90 95  
 Gly Ala His Gly Arg Gly Arg Ser Tyr Ser Arg Gly Gly Gly Asp Gln

638

100 105 110  
 Gly Tyr Gly Ser Gly Arg Tyr Tyr Asp Ser Arg Pro Gly Gly Tyr Gly  
 115 120 125  
 Tyr Gly Tyr Gly Arg Ser Arg Asp Tyr Asn Gly Arg Asn Gln Gly Gly  
 130 135 140  
 Tyr Asp Arg Tyr Ser Gly Gly Asn Tyr Arg Asp Asn Tyr Asp Asn  
 145 150 155

<210> 631  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 631  
 Phe Asn Val Phe Tyr Leu Thr Leu Arg Ser Cys Leu Ile Lys Thr Leu  
 1 5 10 15  
 Asn Ser Thr Cys Lys Met Val Ala Gln Cys Tyr Ala Arg Ser Gly Cys  
 20 25 30  
 Ser Leu Val Leu Asn Glu His Ile Cys Asn Thr Thr Cys Asn Ser Ile  
 35 40 45

<210> 632  
 <211> 679  
 <212> PRT  
 <213> Homo sapiens

<400> 632  
 Arg Ile Trp Val Asn Ile Ser Leu Ser Gly Ile Lys Ile Ile Asp Glu  
 1 5 10 15  
 Lys Thr Gly Val Ile Glu His Glu His Pro Val Asn Lys Ile Ser Phe  
 20 25 30  
 Ile Ala Arg Asp Val Thr Asp Asn Arg Ala Phe Gly Tyr Val Cys Gly  
 35 40 45  
 Gly Glu Gly Gln His Gln Phe Phe Ala Ile Lys Thr Gly Gln Gln Ala  
 50 55 60



Glu	Pro	Leu	Val	Val	Asp	Leu	Lys	Asp	Leu	Phe	Gln	Val	Ile	Tyr	Asn	
65					70					75					80	
Val	Lys	Lys	Lys	Glu	Glu	Glu	Lys	Lys	Lys	Ile	Glu	Glu	Ala	Ser	Lys	
				85					90					95		
Ala	Val	Glu	Asn	Gly	Ser	Glu	Ala	Leu	Met	Ile	Leu	Asp	Asp	Gln	Thr	
			100					105					110			
Asn	Lys	Leu	Lys	Ser	Gly	Val	Asp	Gln	Met	Asp	Leu	Phe	Gly	Asp	Met	
		115					120					125				
Ser	Thr	Pro	Pro	Asp	Leu	Asn	Ser	Pro	Thr	Glu	Ser	Lys	Asp	Ile	Leu	
	130					135						140				
Leu	Val	Asp	Leu	Asn	Ser	Glu	Ile	Asp	Thr	Asn	Gln	Asn	Ser	Leu	Arg	
145					150					155					160	
Glu	Asn	Pro	Phe	Leu	Thr	Asn	Gly	Ile	Thr	Ser	Cys	Ser	Leu	Pro	Arg	
				165					170					175		
Pro	Thr	Pro	Gln	Ala	Ser	Phe	Leu	Pro	Glu	Asn	Ala	Phe	Ser	Ala	Asn	
			180					185					190			
Leu	Asn	Phe	Phe	Pro	Thr	Pro	Asn	Pro	Asp	Pro	Phe	Arg	Asp	Asp	Pro	
		195					200					205				
Phe	Thr	Gln	Pro	Asp	Gln	Ser	Thr	Pro	Ser	Ser	Phe	Asp	Ser	Leu	Lys	
	210					215					220					
Ser	Pro	Asp	Gln	Lys	Lys	Glu	Asn	Ser	Ser	Ser	Ser	Ser	Thr	Pro	Leu	
225					230					235					240	
Ser	Asn	Gly	Pro	Leu	Asn	Gly	Asp	Val	Asp	Tyr	Phe	Gly	Gln	Gln	Phe	
				245					250					255		
Asp	Gln	Ile	Ser	Asn	Arg	Thr	Gly	Lys	Gln	Glu	Ala	Gln	Ala	Gly	Pro	
			260					265					270			
Trp	Pro	Phe	Ser	Ser	Ser	Gln	Thr	Gln	Pro	Ala	Val	Arg	Thr	Gln	Asn	
		275					280					285				
Gly	Val	Ser	Glu	Arg	Glu	Gln	Asn	Gly	Phe	Ser	Val	Lys	Ser	Ser	Pro	
	290					295					300					
Asn	Pro	Phe	Val	Gly	Ser	Pro	Pro	Lys	Gly	Leu	Ser	Ile	Gln	Asn	Gly	
305					310					315					320	
Val	Lys	Gln	Asp	Leu	Glu	Ser	Ser	Val	Gln	Ser	Ser	Pro	His	Asp	Ser	
				325					330					335		

640

```

Ile Ala Ile Ile Pro Pro Pro Gln Ser Thr Lys Pro Gly Arg Gly Arg
      340                      345                      350

Arg Thr Ala Lys Ser Ser Ala Asn Asp Leu Leu Ala Ser Asp Ile Phe
      355                      360                      365

Ala Pro Pro Val Ser Glu Pro Ser Gly Gln Ala Ser Pro Thr Gly Gln
      370                      375                      380

Pro Thr Ala Leu Gln Pro Asn Pro Leu Asp Leu Phe Lys Thr Ser Ala
      385                      390                      395                      400

Pro Ala Pro Val Gly Pro Leu Val Gly Leu Gly Gly Val Thr Val Thr
      405                      410                      415

Leu Pro Gln Ala Gly Pro Trp Asn Thr Ala Ser Leu Val Phe Asn Gln
      420                      425                      430

Ser Pro Ser Met Ala Pro Gly Ala Met Met Gly Gly Gln Pro Ser Gly
      435                      440                      445

Phe Ser Gln Pro Val Ile Phe Gly Thr Ser Pro Ala Val Ser Gly Trp
      450                      455                      460

Asn Gln Pro Ser Pro Phe Ala Ala Ser Thr Pro Pro Pro Val Pro Val
      465                      470                      475                      480

Val Trp Gly Pro Ser Ala Ser Val Ala Pro Asn Ala Trp Ser Thr Thr
      485                      490                      495

Ser Pro Leu Gly Asn Pro Phe Gln Ser Asn Ile Phe Pro Ala Pro Ala
      500                      505                      510

Val Ser Thr Gln Pro Pro Ser Met His Ser Ser Leu Leu Val Thr Pro
      515                      520                      525

Pro Gln Pro Pro Pro Arg Ala Gly Pro Pro Lys Asp Ile Ser Ser Asp
      530                      535                      540

Ala Phe Thr Ala Leu Asp Pro Leu Gly Asp Lys Glu Ile Lys Asp Val
      545                      550                      555                      560

Lys Glu Met Phe Lys Asp Phe Gln Leu Arg Gln Pro Pro Ala Val Pro
      565                      570                      575

Ala Arg Lys Gly Glu Gln Thr Ser Ser Gly Thr Leu Ser Ala Phe Ala
      580                      585                      590

Ser Tyr Phe Asn Ser Lys Val Gly Ile Pro Gln Glu Asn Ala Asp His
      595                      600                      605

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641

Asp Asp Phe Asp Ala Asn Gln Leu Leu Asn Lys Ile Asn Glu Pro Pro  
 610 615 620  
 Lys Pro Ala Pro Arg Gln Val Ser Leu Pro Val Thr Lys Ser Thr Asp  
 625 630 635 640  
 Asn Ala Phe Glu Asn Pro Phe Phe Lys Asp Ser Phe Gly Ser Ser Gln  
 645 650 655  
 Ala Ser Val Ala Ser Ser Gln Pro Val Ser Ser Glu Met Tyr Arg Asp  
 660 665 670  
 Pro Phe Gly Asn Pro Phe Ala  
 675

<210> 633  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (9)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (150)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (159)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 633  
 Xaa Leu Val Asp Pro Pro Gly Leu Xaa Gly Ile Pro Arg Ala Ala Leu  
 1 5 10 15  
 Gly His Leu Ala Gly Glu Ala Ala Ala Pro Gly Pro Gly Thr Pro  
 20 25 30  
 Cys Ala Ser Arg Gly Ala Arg Leu Pro Gly Pro Val Ser Ser Ala Arg  
 35 40 45

642

Asn Pro Ser Thr Val Cys Leu Cys Pro Glu Gln Pro Thr Cys Ser Asn  
 50 55 60  
 Ala Asp Ser Arg Ala His Pro Leu Gly Asp Glu Gly Gly Thr Ala Ser  
 65 70 75 80  
 Lys Lys Gln Lys Asn Lys Lys Lys Thr Arg Asn Arg Ala Ser Val Ala  
 85 90 95  
 Asn Gly Gly Glu Lys Ala Ser Glu Lys Leu Ala Pro Glu Glu Val Pro  
 100 105 110  
 Leu Ser Ala Glu Ala Gln Ala Gln Gln Leu Ala Gln Glu Leu Ala Trp  
 115 120 125  
 Cys Val Glu Gln Leu Glu Leu Gly Leu Lys Arg Gln Lys Pro Thr Pro  
 130 135 140  
 Lys Gln Lys Glu Gln Xaa Leu Glu Gln Ser Glu Pro Cys Ala Xaa Lys  
 145 150 155 160  
 Glu Arg Pro Cys Pro Gly Arg Gly Ser  
 165

&lt;210&gt; 634

&lt;211&gt; 389

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (152)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (160)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (175)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

643

&lt;400&gt; 634

Xaa	Gly	Leu	Cys	Ala	Pro	Gln	Pro	Gly	Val	Arg	Lys	Ala	Arg	Gly	Ala	1	5	10	15
Gly	Asn	Trp	Arg	Val	Gly	Leu	Gln	Thr	Gly	Glu	Ala	Ala	Pro	Ser	Pro	20	25	30	
His	Arg	Asp	Leu	Arg	Asp	Thr	Pro	Asp	Pro	Arg	Pro	Trp	Leu	Ala	Arg	35	40	45	
Thr	His	Arg	Met	Thr	Thr	Thr	Leu	Val	Ser	Ala	Thr	Ile	Phe	Asp	Leu	50	55	60	
Ser	Glu	Val	Leu	Cys	Lys	Gly	Asn	Lys	Met	Leu	Asn	Tyr	Ser	Ala	Pro	65	70	75	80
Ser	Ala	Gly	Gly	Cys	Leu	Leu	Asp	Arg	Lys	Ala	Val	Gly	Thr	Pro	Ala	85	90	95	
Gly	Gly	Gly	Phe	Pro	Arg	Arg	His	Ser	Val	Thr	Leu	Pro	Ser	Ser	Lys	100	105	110	
Phe	His	Gln	Asn	Gln	Leu	Leu	Ser	Ser	Leu	Lys	Gly	Glu	Pro	Ala	Pro	115	120	125	
Ala	Leu	Ser	Ser	Arg	Asp	Ser	Arg	Phe	Arg	Asp	Arg	Ser	Phe	Ser	Glu	130	135	140	
Gly	Ala	Ser	Gly	Cys	Cys	Pro	Xaa	Arg	Ser	Ser	Pro	Gly	Ala	Ala	Xaa	145	150	155	160
Ser	Asn	Ser	Ser	Arg	Tyr	Lys	Thr	Glu	Leu	Cys	Arg	Pro	Phe	Xaa	Glu	165	170	175	
Asn	Gly	Ala	Cys	Lys	Tyr	Gly	Asp	Lys	Cys	Gln	Phe	Ala	His	Gly	Ile	180	185	190	
His	Glu	Leu	Arg	Ser	Leu	Thr	Arg	His	Pro	Lys	Tyr	Lys	Thr	Glu	Leu	195	200	205	
Cys	Arg	Thr	Phe	His	Thr	Ile	Gly	Phe	Cys	Pro	Tyr	Gly	Pro	Arg	Cys	210	215	220	
His	Phe	Ile	His	Asn	Ala	Glu	Glu	Arg	Arg	Ala	Leu	Ala	Gly	Ala	Arg	225	230	235	240
Asp	Leu	Ser	Ala	Asp	Arg	Pro	Arg	Leu	Gln	His	Ser	Phe	Ser	Phe	Ala	245	250	255	
Gly	Phe	Pro	Ser	Ala	Ala	Ala	Thr	Ala	Ala	Ala	Thr	Gly	Leu	Leu	Asp				

644

260						265						270				
Ser	Pro	Thr	Ser	Ile	Thr	Pro	Pro	Pro	Ile	Leu	Ser	Ala	Asp	Asp	Leu	
275						280						285				
Leu	Gly	Ser	Pro	Thr	Leu	Pro	Asp	Gly	Thr	Asn	Asn	Pro	Phe	Ala	Phe	
290						295						300				
Ser	Ser	Gln	Glu	Leu	Ala	Ser	Leu	Phe	Ala	Pro	Ser	Met	Gly	Leu	Pro	
305						310						315				
Gly	Gly	Gly	Ser	Pro	Thr	Thr	Phe	Leu	Phe	Arg	Pro	Met	Ser	Glu	Ser	
325						330						335				
Pro	His	Met	Phe	Asp	Ser	Pro	Pro	Ser	Pro	Gln	Asp	Ser	Leu	Ser	Asp	
340						345						350				
Gln	Glu	Gly	Tyr	Leu	Ser	Ser	Ser	Ser	Ser	Ser	His	Ser	Gly	Ser	Asp	
355						360						365				
Ser	Pro	Thr	Leu	Asp	Asn	Ser	Arg	Arg	Leu	Pro	Ile	Phe	Ser	Arg	Leu	
370						375						380				
Ser Ile Ser Asp Asp																
385																

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<210> 635
<211> 340
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 635  
Ser Thr His Ala Ser Gly Ser Leu Tyr Asn Thr Phe Val Ile Glu Glu  
1 5 10 15  
Lys His Gly Phe Asn Gln Gln Thr Leu Gly Phe Phe Met Lys Asp Ala  
20 25 30  
Val Lys Lys Phe Ile Val Thr Gln Cys Ile Leu Leu Pro Val Ser Ser  
35 40 45  
Leu Leu Leu Tyr Ile Ile Lys Ile Gly Gly Asp Tyr Phe Phe Ile Tyr  
50 55 60

645

Ala	Trp	Leu	Phe	Thr	Leu	Val	Val	Ser	Leu	Val	Leu	Val	Thr	Ile	Tyr	65	70	75	80
Ala	Asp	Tyr	Ile	Ala	Pro	Leu	Phe	Asp	Lys	Phe	Thr	Pro	Leu	Pro	Glu	85	90	95	
Gly	Lys	Leu	Lys	Xaa	Glu	Ile	Glu	Val	Met	Ala	Lys	Ser	Ile	Asp	Phe	100	105	110	
Pro	Leu	Thr	Lys	Val	Tyr	Val	Val	Glu	Gly	Ser	Lys	Arg	Ser	Ser	His	115	120	125	
Ser	Asn	Ala	Tyr	Phe	Tyr	Gly	Phe	Phe	Lys	Asn	Lys	Arg	Ile	Val	Leu	130	135	140	
Phe	Asp	Thr	Leu	Leu	Glu	Glu	Tyr	Ser	Val	Leu	Asn	Lys	Asp	Ile	Gln	145	150	155	160
Glu	Asp	Ser	Gly	Met	Glu	Pro	Arg	Asn	Glu	Glu	Glu	Gly	Asn	Ser	Glu	165	170	175	
Glu	Ile	Lys	Ala	Lys	Val	Lys	Asn	Lys	Lys	Gln	Gly	Cys	Lys	Asn	Glu	180	185	190	
Glu	Val	Leu	Ala	Val	Leu	Gly	His	Glu	Leu	Gly	His	Trp	Lys	Leu	Gly	195	200	205	
His	Thr	Val	Lys	Asn	Ile	Ile	Ile	Ser	Gln	Met	Asn	Ser	Phe	Leu	Cys	210	215	220	
Phe	Phe	Leu	Phe	Ala	Val	Leu	Ile	Gly	Arg	Lys	Glu	Leu	Phe	Ala	Ala	225	230	235	240
Phe	Gly	Phe	Tyr	Asp	Ser	Gln	Pro	Thr	Leu	Ile	Gly	Leu	Leu	Ile	Ile	245	250	255	
Phe	Gln	Phe	Ile	Phe	Ser	Pro	Tyr	Asn	Glu	Val	Leu	Ser	Phe	Cys	Leu	260	265	270	
Thr	Val	Leu	Ser	Arg	Arg	Phe	Glu	Phe	Gln	Ala	Asp	Ala	Phe	Ala	Lys	275	280	285	
Lys	Leu	Gly	Lys	Ala	Lys	Asp	Leu	Tyr	Ser	Ala	Leu	Ile	Lys	Leu	Asn	290	295	300	
Lys	Asp	Asn	Leu	Gly	Phe	Pro	Val	Ser	Asp	Trp	Leu	Phe	Ser	Met	Trp	305	310	315	320
His	Tyr	Ser	His	Pro	Pro	Leu	Leu	Glu	Arg	Leu	Gln	Ala	Leu	Lys	Thr	325	330	335	

646

Met Lys Gln His  
340

<210> 636  
<211> 200  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (10)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (11)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 636  
Ala Ser Ile Gly Arg Thr Gly Gly Ser Xaa Xaa Ser Cys Ser Gly Gly  
1 5 10 15  
Arg Leu Leu Gly Val Glu Phe Pro Ser Ala Pro Arg Val Arg Pro Phe  
20 25 30  
Glu Arg Ser Ala Pro Ala Pro Ala Thr Ser Leu Leu Gly Ala Met Thr  
35 40 45  
Thr Thr Thr Thr Phe Lys Gly Val Asp Pro Asn Ser Arg Asn Ser Ser  
50 55 60  
Arg Val Leu Arg Pro Pro Gly Gly Gly Ser Asn Phe Ser Leu Gly Phe  
65 70 75 80  
Asp Glu Pro Thr Glu Gln Pro Val Arg Lys Asn Lys Met Ala Ser Asn  
85 90 95  
Ile Phe Gly Thr Pro Glu Glu Asn Gln Ala Ser Trp Ala Lys Ser Ala  
100 105 110  
Gly Ala Lys Ser Ser Gly Gly Arg Glu Asp Leu Glu Ser Ser Gly Leu  
115 120 125  
Gln Arg Arg Asn Ser Ser Glu Ala Ser Ser Gly Asp Phe Leu Asp Leu  
130 135 140  
Lys Gly Glu Gly Asp Ile His Glu Asn Val Asp Thr Asp Leu Pro Gly  
145 150 155 160



Ser	Leu	Gly	Gln	Ser	Glu	Glu	Lys	Pro	Val	Pro	Ala	Ala	Pro	Val	Pro
				165					170					175	
Ser	Pro	Val	Ala	Pro	Ala	Pro	Val	Pro	Ser	Arg	Arg	Asn	Pro	Pro	Gly
			180					185					190		
Gly	Lys	Ser	Ser	Leu	Val	Leu	Gly								
		195					200								

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<400> 637
Ser Phe Arg Arg Pro Val Ala Met Leu Cys Ser Gln Ser Asn Phe Gln
 1             5             10             15

Lys Thr Ile Asn Lys Lys Glu Ser Met Phe Lys Leu Lys Trp Asn Leu
          20             25             30

Glu Asn Leu Ser Leu Leu Thr Tyr Phe Asn Ala Thr Gly Asn Leu Gly
      35             40             45

Phe Thr Thr Lys Cys Cys
    50

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<400> 638
Ala Ala Pro Arg Arg His Arg Gly Ala Val Glu Ser Pro Pro Pro Asp
  1             5             10             15
Pro Arg Pro Val Ala Arg Pro His Leu Ala Asn Arg Gly Gly Pro Arg
          20             25             30
Ser Val Arg Thr Thr Pro Pro Leu Leu Ser Pro Pro Pro Asp His Ala
          35             40             45
Pro Gln Leu Arg Lys Met Gly Asn Cys Leu Lys Ser Pro Thr Ser Asp
          50             55             60
Asp Ile Ser Leu Leu His Glu Ser Gln Ser Asp Arg Ala Ser Phe Gly
  65             70             75             80

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648

Glu Gly Thr Glu Pro Asp Gln Glu Pro Pro Pro Pro Tyr Gln Glu Gln  
                                     85                                    90                                    95  
 Val Pro Val Pro Val Tyr His Pro Thr Pro Ser Gln Thr Arg Leu Ala  
                                     100                                    105                                    110  
 Thr Gln Leu Thr Glu Glu Glu Gln Ile Arg Ile Ala Gln Arg Ile Gly  
                                     115                                    120                                    125  
 Leu Ile Gln His Leu Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly  
                                     130                                    135                                    140  
 Ser Glu Lys Lys Ile Arg Glu Cys Val Ile Cys Met Met Asp Phe Val  
                                     145                                    150                                    155                                    160  
 Tyr Gly Asp Pro Ile Arg Phe Leu Pro Cys Met His Ile Tyr His Leu  
                                     165                                    170                                    175  
 Asp Cys Ile Asp Asp Trp Leu Met Arg Ser Phe Thr Cys Pro Ser Cys  
                                     180                                    185                                    190  
 Met Glu Pro Val Asp Ala Ala Leu Leu Ser Ser Tyr Glu Thr Asn  
                                     195                                    200                                    205

&lt;210&gt; 639

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 639

Gly Gln Val Gln Gly Asn Ser Ser Ile Lys Leu Glu Leu Asp Ala Ser  
     1                                    5                                    10                                    15  
 Lys Lys Lys Glu Ser Lys Asp His Gln Leu Leu Arg Tyr Leu Leu Asp  
                                     20                                    25                                    30  
 Lys Asp Glu Lys Asp Leu Arg Ser Thr Pro Asn Leu Ser Leu Asp Asp  
                                     35                                    40                                    45  
 Val Lys Val Lys Val Glu Lys Lys Glu Gln Met Asp Pro Cys Asn Thr  
                                     50                                    55                                    60  
 Asn Pro Thr Pro Met Thr Lys Pro Thr Pro Glu Glu Ile Lys Leu Glu  
                                     65                                    70                                    75                                    80  
 Ala Gln Ser Gln Phe Thr Ala Asp Leu Asp Gln Phe Asp Gln Leu Leu  
                                     85                                    90                                    95

649

Pro Thr Leu Glu Lys Ala Ala Gln Leu Pro Gly Leu Cys Glu Thr Asp  
 100 105 110

Arg Met Asp Gly Ala Val Thr Ser Val Thr Ile Lys Ser Glu Ile Leu  
 115 120 125

Pro Ala Ser Leu Gln Ser Ala Leu Pro Asp Pro Leu Pro Gly  
 130 135 140

&lt;210&gt; 640

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 640

Asp Asn Arg Arg Thr Phe Leu Pro Arg Leu Phe Val Gly Val Val Pro  
 1 5 10 15

Gly Thr Gly Phe Gly Glu Leu Val Tyr Asn Gln Gly Leu Ile Leu Lys  
 20 25 30

Met Ser Phe Phe Ile Leu Leu Phe Phe Lys His Gln Ile Leu Leu Phe  
 35 40 45

Phe Phe Phe Leu Pro Ser Pro Gln Ile Pro Ser Gln Ile Ile Leu Leu  
 50 55 60

Thr Thr Ile Pro Thr Gly Arg Gly Glu Leu Lys His Leu Leu Pro Leu  
 65 70 75 80

Pro Cys Phe Ser Phe Ile Phe Tyr Phe Phe Ala Ser Val Leu Met Phe  
 85 90 95

Leu His Thr Leu His Leu Tyr Ser Lys Val  
 100 105

&lt;210&gt; 641

&lt;211&gt; 645

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

650

&lt;221&gt; SITE

&lt;222&gt; (65)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 641

Cys	Ala	Xaa	Arg	Glu	Arg	Leu	Lys	Asn	Pro	Asn	Ala	Pro	Met	Leu	Pro	1	5	10	15
Pro	Pro	Lys	Asn	Lys	Glu	Asp	Phe	Glu	Lys	Thr	Leu	Ser	Gln	Ala	Ile	20	25	30	
Val	Lys	Val	Val	Ile	Pro	Thr	Glu	Arg	Asn	Leu	Leu	Ala	Leu	Ile	His	35	40	45	
Arg	Met	Ile	Glu	Phe	Val	Val	Arg	Glu	Gly	Pro	Met	Phe	Glu	Ala	Met	50	55	60	
Xaa	Met	Asn	Arg	Glu	Ile	Asn	Asn	Pro	Met	Phe	Arg	Phe	Leu	Phe	Glu	65	70	75	80
Asn	Gln	Thr	Pro	Ala	His	Val	Tyr	Tyr	Arg	Trp	Lys	Leu	Tyr	Ser	Ile	85	90	95	
Leu	Gln	Gly	Asp	Ser	Pro	Thr	Lys	Trp	Arg	Thr	Glu	Asp	Phe	Arg	Met	100	105	110	
Phe	Lys	Asn	Gly	Ser	Phe	Trp	Arg	Pro	Pro	Pro	Leu	Asn	Pro	Tyr	Leu	115	120	125	
His	Gly	Met	Ser	Glu	Glu	Gln	Glu	Thr	Glu	Ala	Phe	Val	Glu	Glu	Pro	130	135	140	
Ser	Lys	Lys	Gly	Ala	Leu	Lys	Glu	Glu	Gln	Arg	Asp	Lys	Leu	Glu	Glu	145	150	155	160
Ile	Leu	Arg	Gly	Leu	Thr	Pro	Arg	Lys	Asn	Asp	Ile	Gly	Asp	Ala	Met	165	170	175	
Val	Phe	Cys	Leu	Asn	Asn	Ala	Glu	Ala	Ala	Glu	Glu	Ile	Val	Asp	Cys	180	185	190	
Ile	Thr	Glu	Ser	Leu	Ser	Ile	Leu	Lys	Thr	Pro	Leu	Pro	Lys	Lys	Ile	195	200	205	
Ala	Arg	Leu	Tyr	Leu	Val	Ser	Asp	Val	Leu	Tyr	Asn	Ser	Ser	Ala	Lys	210	215	220	
Val	Ala	Asn	Ala	Ser	Tyr	Tyr	Arg	Lys	Phe	Phe	Glu	Thr	Lys	Leu	Cys	225	230	235	240
Gln	Ile	Phe	Ser	Asp	Leu	Asn	Ala	Thr	Tyr	Arg	Thr	Ile	Gln	Gly	His				



652

515		520		525
Lys Glu Lys Asp Glu Cys Thr Pro Thr Arg Lys Glu Arg Lys Arg Arg				
530		535		540
His Ser Thr Ser Pro Ser Pro Ser Arg Ser Ser Ser Gly Arg Arg Val				
545		550		555
				560
Lys Ser Pro Ser Pro Lys Ser Glu Arg Ser Glu Arg Ser Glu Arg Ser				
		565		570
				575
His Lys Glu Ser Ser Arg Ser Arg Ser Ser His Lys Asp Ser Pro Arg				
		580		585
				590
Asp Val Ser Lys Lys Ala Lys Arg Ser Pro Ser Gly Ser Arg Thr Pro				
		595		600
				605
Lys Arg Ser Arg Arg Ser Arg Ser Arg Ser Pro Lys Lys Ser Gly Lys				
		610		615
				620
Lys Ser Arg Ser Gln Ser Arg Ser Pro His Arg Ser His Lys Lys Ser				
		625		630
				635
				640
Lys Lys Asn Lys His				
		645		

&lt;210&gt; 642

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (103)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 642

Trp Xaa Gly Val Ile Gly Thr Gly Arg Tyr Arg Val Cys Glu Val Asp
1 5 10 15

Pro Glu Leu Thr Glu Lys Leu Arg Lys Phe Arg Phe Arg Lys Glu Thr
20 25 30

Asp Asn Ala Ala Ile Ile Met Lys Val Asp Lys Asp Arg Gln Met Val

653

35	40	45
Val Leu Glu Glu Glu Phe Gln Asn Ile Ser Pro Glu Glu Leu Lys Met		
50	55	60
Glu Leu Pro Glu Arg Gln Pro Arg Phe Val Val Tyr Ser Tyr Lys Tyr		
65	70	75
Val His Asp Asp Gly Arg Val Ser Tyr Pro Leu Cys Phe Ile Phe Ser		
85	90	95
Ser Pro Val Gly Cys Lys Xaa Glu Gln Gln Met Met Tyr Ala Gly Ser		
100	105	110
Lys Asn Arg Leu Val Gln Thr Ala Glu Leu Thr Lys Val Phe Glu Ile		
115	120	125
Arg Thr Thr Asp Asp Leu Thr Glu Ala Trp Leu Gln Glu Lys Leu Ser		
130	135	140
Phe Phe Arg		
145		

&lt;210&gt; 643

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 643

Lys Asn Thr Ile Ser Asn Asn Ser Asp Met Ala Glu Val Lys Ser Met		
1	5	10
Phe Arg Glu Val Leu Pro Lys Gln Gly Pro Leu Phe Val Glu Asp Ile		
20	25	30
Met Thr Met Val Leu Cys Lys Pro Lys Leu Leu Pro Leu Lys Ser Leu		
35	40	45
Thr Leu Glu Lys Leu Glu Lys Met His Gln Ala Ala Gln Asn Thr Ile		
50	55	60
Arg Gln Gln Glu Met Ala Glu Lys Asp Gln Arg Gln Ile Thr His		
65	70	75

&lt;210&gt; 644

&lt;211&gt; 273

&lt;212&gt; PRT

<213> Homo sapiens

$\langle 220 \rangle$

<221> SITE

$\langle 222 \rangle$  (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 644

Xaa	Ala	Gly	Pro	Arg	Ser	Ile	Arg	Cys	Pro	Leu	Ile	Phe	Leu	Pro	Pro
1				5					10					15	
Val	Ser	Gly	Thr	Ala	Asp	Val	Phe	Phe	Arg	Gln	Ile	Leu	Ala	Leu	Thr
			20					25					30		
Gly	Trp	Gly	Tyr	Arg	Val	Ile	Ala	Leu	Gln	Tyr	Pro	Val	Tyr	Trp	Asp
		35					40					45			
His	Leu	Glu	Phe	Cys	Asp	Gly	Phe	Arg	Lys	Leu	Leu	Asp	His	Leu	Gln
	50					55					60				
Leu	Asp	Lys	Val	His	Leu	Phe	Gly	Ala	Ser	Leu	Gly	Gly	Phe	Leu	Ala
65					70					75					80
Gln	Lys	Phe	Ala	Glu	Tyr	Thr	His	Lys	Ser	Pro	Arg	Val	His	Ser	Leu
				85					90					95	
Ile	Leu	Cys	Asn	Ser	Phe	Ser	Asp	Thr	Ser	Ile	Phe	Asn	Gln	Thr	Trp
			100					105					110		
Thr	Ala	Asn	Ser	Phe	Trp	Leu	Met	Pro	Ala	Phe	Met	Leu	Lys	Lys	Ile
		115					120					125			
Val	Leu	Gly	Asn	Phe	Ser	Ser	Gly	Pro	Val	Asp	Pro	Met	Met	Ala	Asp
	130					135					140				
Ala	Ile	Asp	Phe	Met	Val	Asp	Arg	Leu	Glu	Ser	Leu	Gly	Gln	Ser	Glu
145					150					155					160
Leu	Ala	Ser	Arg	Leu	Thr	Leu	Asn	Cys	Gln	Asn	Ser	Tyr	Val	Glu	Pro
				165					170					175	
His	Lys	Ile	Arg	Asp	Ile	Pro	Val	Thr	Ile	Met	Asp	Val	Phe	Asp	Gln
			180					185					190		
Ser	Ala	Leu	Ser	Thr	Glu	Ala	Lys	Glu	Glu	Met	Tyr	Lys	Leu	Tyr	Pro
		195					200					205			
Asn	Ala	Arg	Arg	Ala	His	Leu	Lys	Thr	Gly	Gly	Asn	Phe	Pro	Tyr	Leu
	210					215					220				
Cys	Arg	Ser	Ala	Glu	Val	Asn	Leu	Tyr	Val	Gln	Ile	His	Leu	Leu	Gln



225						230						235						240
Phe	His	Gly	Thr	Lys	Tyr	Ala	Ala	Ile	Asp	Pro	Ser	Met	Val	Ser	Ala			
					245						250						255	
Glu	Glu	Leu	Glu	Val	Gln	Lys	Gly	Ser	Leu	Gly	Ile	Ser	Gln	Glu	Glu			
					260						265						270	
					Gln													

```

<400> 645
Phe Ala Asn Ser Tyr Leu Leu Asn Gly Glu Val Leu Lys Ile Ser Pro
  1             5             10             15
Gly Lys Phe Lys Ile Gln Thr Pro Ser Ile Glu His Leu His Cys Val
  20             25             30
Pro Gly Ser Lys Ile Gly Ala Phe Ile His Ile Val Ser Ile Pro Val
  35             40             45
Arg Ser Glu Leu Ser Leu His Leu Lys Leu Glu Glu Thr Cys Ser Glu
  50             55             60
Cys Lys Lys Leu Pro Cys Leu Arg Ser Pro Arg Lys Glu Pro Ser Glu
  65             70             75             80
Pro Ala Thr Glu Ser Trp Ser Leu
          85

```

<400> 646  
Phe Tyr Asn Glu Met Leu Leu Ser Ile Gly Met Leu Met Leu Ser Ala  
1 5 10 15  
Thr Gln Val Tyr Thr Ile Leu Thr Val Gln Leu Phe Ala Phe Leu Asn  
20 25 30

[illegible]

```
<220>
<221> SITE
<222> (130)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<400> 647
Met Leu Asp Ile Ser Gly Phe Gln Gly Gly Pro Val Glu Ile Leu Pro
  1             5             10             15

Phe Leu Tyr Leu Gly Ser Ala Tyr His Ala Ser Arg Lys Asp Met Leu
      20             25             30

Asp Ala Leu Gly Ile Thr Ala Leu Ile Asn Val Ser Ala Asn Cys Pro
      35             40             45

Asn His Phe Glu Gly His Tyr Gln Tyr Lys Ser Ile Pro Val Glu Asp
      50             55             60

Asn His Lys Ala Asp Ile Ser Ser Trp Phe Asn Glu Ala Ile Asp Phe
      65             70             75             80

Ile Asp Ser Ile Lys Asn Ala Gly Gly Arg Val Phe Val His Cys Gln
      85             90             95

Ala Gly Ile Ser Arg Ser Ala Thr Ile Cys Leu Ala Tyr Leu Met Arg
      100            105            110

Thr Asn Arg Val Lys Leu Asp Glu Ala Phe Glu Phe Val Lys Gln Arg
      115            120            125

```

657

Arg Xaa Ser Ser Leu Pro Thr Ser Ala Ser Trp Ala Ser Cys Cys Ser  
 130 135 140

Leu Ser Pro Arg Cys Trp Leu Arg Thr Val Arg Gln Arg Leu Gly Ala  
 145 150 155 160

Pro Pro Trp Leu Cys Ser Thr Glu Ala Pro Pro Pro Pro Cys Ser  
 165 170 175

Thr Ser Pro Ser Pro Ser Leu Ser Thr Pro Arg Thr Val Arg  
 180 185 190

&lt;210&gt; 648

&lt;211&gt; 340

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (134)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 648

Ser Gln Asp Gln Gly Glu Arg Gly Gly Ala Gly Ala Ala Arg Gln Phe  
 1 5 10 15

Leu Leu Val Asn Phe Asn His Ile His Lys Arg Ile Arg Arg Val Ala  
 20 25 30

Asp Lys Tyr Leu Ser Gly Leu Val Asp Lys Phe Pro His Leu Leu Trp  
 35 40 45

Ser Gly Thr Val Leu Lys Thr Met Leu Asp Ile Leu Gln Thr Leu Ser  
 50 55 60

Leu Ser Leu Ser Ala Asp Ile His Lys Asp Gln Pro Tyr Tyr Asp Ile  
 65 70 75 80

Pro Asp Ala Pro Tyr Arg Ile Thr Val Pro Asp Thr Tyr Glu Ala Arg  
 85 90 95

Glu Ser Ile Val Lys Asp Phe Ala Ala Arg Cys Gly Met Ile Leu Gln  
 100 105 110

Glu Ala Met Lys Trp Ala Pro Thr Val Thr Lys Ser His Leu Gln Glu  
 115 120 125

Tyr Leu Asn Lys His Xaa Asn Trp Val Ser Gly Leu Ser Gln His Thr

658

130                      135                      140  
 Gly Leu Ala Met Ala Thr Glu Ser Ile Leu His Phe Ala Gly Tyr Asn  
 145                      150                      155                      160  
 Lys Gln Asn Thr Thr Leu Gly Ala Thr Gln Leu Ser Glu Arg Pro Ala  
                     165                      170                      175  
 Cys Val Lys Lys Asp Tyr Ser Asn Phe Met Ala Ser Leu Asn Leu Arg  
                     180                      185                      190  
 Asn Arg Tyr Ala Gly Glu Val Tyr Gly Met Ile Arg Phe Ser Gly Thr  
                     195                      200                      205  
 Thr Gly Gln Met Ser Asp Leu Asn Lys Met Met Val Gln Asp Leu His  
                     210                      215                      220  
 Ser Ala Leu Asp Arg Ser His Pro Gln His Tyr Thr Gln Ala Met Phe  
 225                      230                      235                      240  
 Lys Leu Thr Ala Met Leu Ile Ser Ser Lys Asp Cys Asp Pro Gln Leu  
                     245                      250                      255  
 Leu His His Leu Cys Trp Gly Pro Leu Arg Met Phe Asn Glu His Gly  
                     260                      265                      270  
 Met Glu Thr Ala Leu Ala Cys Trp Glu Trp Leu Leu Ala Gly Lys Asp  
                     275                      280                      285  
 Gly Val Glu Val Pro Phe Leu Val Thr Trp His Thr Ile Asp Ala Asp  
                     290                      295                      300  
 Ala Gln Ser Ser Ala Met Cys Cys Ala Gly Arg Pro Arg Thr His Pro  
 305                      310                      315                      320  
 Gln Ala Ser Pro Thr Ser Pro Ala Cys Thr Arg Arg Thr Leu Ser Arg  
                     325                      330                      335  
 Arg Ser Thr Gly  
                     340

&lt;210&gt; 649

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 649

Ala Val Arg Arg Gly Ala Gly Cys Pro Ala Pro Gly Val Arg Ala Arg  
 1                      5                      10                      15

659

Gly Ala Met Ala His Val Gly Ser Arg Lys Arg Ser Arg Ser Arg Ser  
                   20                                  25                                  30  
 Arg Ser Arg Gly Arg Gly Ser Glu Lys Arg Lys Lys Lys Ser Arg Lys  
                   35                                  40                                  45  
 Asp Thr Ser Arg Asn Cys Ser Ala Ser Thr Ser Gln Gly Arg Lys Ala  
                   50                                  55                                  60  
 Ser Thr Ala Pro Gly Ala Glu Glu Arg Ser Lys Gln Lys Ala Arg Arg  
                   65                                  70                                  75                                  80  
 Arg Thr Arg Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
                                   85                                  90                                  95  
 Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Asp Gly Arg Lys  
                   100                                  105                                  110  
 Lys Arg Gly Lys Tyr Lys Asp Lys Arg Arg Lys Lys Lys Lys Lys Arg  
                   115                                  120                                  125  
 Lys Lys Leu Lys Lys Lys Gly Lys Glu Lys Ala Glu Ala Gln Gln Val  
                   130                                  135                                  140  
 Glu Ala Leu Pro Gly Pro Ser Leu Asp Gln Trp His Arg Ser Ala Gly  
                   145                                  150                                  155                                  160  
 Glu Glu Glu Asp Gly Pro Val Leu Thr Asp Glu Gln Lys Ser Arg Ile  
                   165                                  170                                  175  
 Gln Ala Met Lys Pro Met Thr Lys Glu Glu Trp Asp Ala Arg Gln Ser  
                   180                                  185                                  190  
 Ile Ile Arg Lys Trp Trp Thr Leu Arg Arg Gly Ala Pro Gly Leu Leu  
                   195                                  200                                  205  
 Arg Glu Met Ala Arg Ser  
                   210

&lt;210&gt; 650

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (375)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

660

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (396)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 650

Gly	Arg	Val	Gly	Gln	Lys	Ser	Gln	Lys	Pro	Arg	Asp	Ser	Ser	Val	Glu
1				5					10					15	
Val	Arg	Ser	Asp	Trp	Glu	Val	Lys	Glu	Glu	Met	Asp	Phe	Pro	Gln	Leu
			20					25					30		
Met	Lys	Met	Arg	Tyr	Leu	Glu	Val	Ser	Glu	Pro	Gln	Asp	Ile	Glu	Cys
		35					40					45			
Cys	Gly	Ala	Leu	Glu	Tyr	Tyr	Asp	Lys	Ala	Phe	Asp	Arg	Ile	Thr	Thr
	50					55					60				
Arg	Ser	Glu	Lys	Pro	Leu	Arg	Ser	Ile	Lys	Arg	Ile	Phe	His	Thr	Val
65					70					75					80
Thr	Thr	Thr	Asp	Asp	Pro	Val	Ile	Arg	Lys	Leu	Ala	Lys	Thr	Gln	Gly
			85						90					95	
Asn	Val	Phe	Ala	Thr	Asp	Ala	Ile	Leu	Ala	Thr	Leu	Met	Ser	Cys	Thr
			100					105					110		
Arg	Ser	Val	Tyr	Ser	Trp	Asp	Ile	Val	Val	Gln	Arg	Val	Gly	Ser	Lys
		115					120					125			
Leu	Phe	Phe	Asp	Lys	Arg	Asp	Asn	Ser	Asp	Phe	Asp	Leu	Leu	Thr	Val
	130						135				140				
Ser	Glu	Thr	Ala	Asn	Glu	Pro	Pro	Gln	Asp	Glu	Gly	Asn	Ser	Phe	Asn
145					150					155					160
Ser	Pro	Arg	Asn	Leu	Ala	Met	Glu	Ala	Thr	Tyr	Ile	Asn	His	Asn	Phe
			165						170					175	
Ser	Gln	Gln	Cys	Leu	Arg	Met	Gly	Lys	Glu	Arg	Tyr	Asn	Phe	Pro	Asn
			180					185					190		
Pro	Asn	Pro	Phe	Val	Glu	Asp	Asp	Met	Asp	Lys	Asn	Glu	Ile	Ala	Ser
		195					200					205			
Val	Ala	Tyr	Arg	Tyr	Arg	Ser	Gly	Lys	Leu	Gly	Asp	Asp	Ile	Asp	Leu
	210					215					220				
Ile	Val	Arg	Cys	Glu	His	Asp	Gly	Val	Met	Thr	Gly	Ala	Asn	Gly	Glu
225					230					235					240

661

Val Ser Phe Ile Asn Ile Lys Thr Leu Asn Glu Trp Asp Ser Arg His  
 245 250 255  
 Cys Asn Gly Val Asp Trp Arg Gln Lys Leu Asp Ser Gln Arg Gly Ala  
 260 265 270  
 Val Ile Ala Thr Glu Leu Lys Asn Asn Ser Tyr Lys Leu Ala Arg Trp  
 275 280 285  
 Thr Cys Cys Ala Leu Leu Ala Gly Ser Glu Tyr Leu Lys Leu Gly Tyr  
 290 295 300  
 Val Ser Arg Tyr His Val Lys Asp Ser Ser Arg His Val Ile Leu Gly  
 305 310 315 320  
 Thr Gln Gln Phe Lys Pro Asn Glu Phe Ala Ser Gln Ile Asn Leu Ser  
 325 330 335  
 Val Glu Asn Ala Trp Gly Ile Leu Arg Cys Val Ile Asp Ile Cys Met  
 340 345 350  
 Lys Leu Glu Glu Gly Lys Tyr Leu Ile Leu Lys Asp Pro Asn Lys Gln  
 355 360 365  
 Val Ile Arg Val Tyr Ser Xaa Pro Asp Gly Thr Phe Ser Ser Asp Glu  
 370 375 380  
 Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Xaa Glu Glu Glu Glu  
 385 390 395 400  
 Thr

&lt;210&gt; 651

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

662

&lt;400&gt; 651

Thr Glu Leu His Thr Gly Arg Glu Thr Lys Asn Ile Thr Ser Ile Leu  
 1 5 10 15

Val Ser Trp Xaa Leu Phe Phe Leu Arg Glu Ser His Ser Val Ala Gly  
 20 25 30

Leu Glu Tyr Ser Gly Xaa Gly Ser Arg Ala His Cys Asn Pro Leu Ala  
 35 40 45

Ser Arg Gly Ser Ser Gln Ser Pro Ala Phe  
 50 55

&lt;210&gt; 652

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 652

Ser Thr Ser Trp Phe Ser Leu Trp Met Glu Arg Ala Trp Ala Ser Leu  
 1 5 10 15

Gly Glu Gly Glu Ala Arg Gly Ala Gly Leu Glu Trp Glu Thr Cys Trp  
 20 25 30

Pro Val Gly Leu Thr Cys Pro Ser Val Leu Ser Pro His Ile Leu Leu  
 35 40 45

Pro Ser Ser Ser His Thr His Thr Phe Gln Gly Trp Gly Glu Pro Asp  
 50 55 60

Cys Gln Asp Pro Arg Ser Gly Ala Pro Tyr Ile Pro Gln Ser Gly Ile  
 65 70 75 80

His Phe Leu Val Pro Gly Met Ala Met Gly Thr Leu Pro Leu Cys Arg  
 85 90 95

Asp Gln Trp Asp Gly Leu Tyr Leu Ser Phe Ser Lys Arg Gly Leu Cys  
 100 105 110

Pro Pro Gly Val Ser Leu Pro Thr Ser Leu Leu Arg Gly Asn Asn Arg  
 115 120 125

Arg Met Gly Phe Leu Leu Trp Gly Glu Phe Ile Pro Ser Pro Arg Val  
 130 135 140

Pro Ser His Thr Val Ile Leu Pro Ser Cys Pro Arg Arg Pro Ala Ala  
 145 150 155 160



663

Gly Lys Glu Leu Pro Arg Lys His Ser Leu Gly Gln Val Leu Ala Phe  
                                   165                                  170                                  175

Leu Asn Phe Arg Asp Ser Tyr Arg Lys Glu Gly Asn Lys Glu Phe Ser  
                                   180                                  185                                  190

Ser Ala Ala Pro Phe Pro Thr Pro Thr Pro Ser Leu Gln Gly Pro Leu  
                                   195                                  200                                  205

Pro Ala Ser  
                                   210

&lt;210&gt; 653

&lt;211&gt; 286

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 653

Ser Arg Arg Pro Pro Ala Ala Cys Ser Arg Leu Leu Arg Glu Pro Ser  
   1                                  5                                  10                                  15

Arg Pro Gly Ala Pro His Arg Arg Gly Thr Gly Arg Ser Cys Ser Gly  
                                   20                                  25                                  30

Thr Arg Gly Arg Trp Asp Thr Gly Gly Leu Asp Thr Ser Leu Gly Arg  
                                   35                                  40                                  45

Asn Arg Leu Arg Phe Ser Pro Glu Gly Lys Arg Ala Pro Gly Ala Gly  
                                   50                                  55                                  60

Pro Gly Gly Ser Ile Arg Ile Tyr Ser Met Arg Phe Cys Pro Phe Ala  
   65                                  70                                  75                                  80

Glu Arg Thr Arg Leu Val Leu Lys Ala Lys Gly Ile Arg His Glu Val  
                                   85                                  90                                  95

Ile Asn Ile Asn Leu Lys Asn Lys Pro Glu Trp Phe Phe Lys Lys Asn  
                                   100                                  105                                  110

Pro Phe Gly Leu Val Pro Val Leu Glu Asn Ser Gln Gly Gln Leu Ile  
                                   115                                  120                                  125

Tyr Glu Ser Ala Ile Thr Cys Glu Tyr Leu Asp Glu Ala Tyr Pro Gly  
                                   130                                  135                                  140

Lys Lys Leu Leu Pro Asp Asp Pro Tyr Glu Lys Ala Cys Gln Lys Met  
   145                                  150                                  155                                  160

Ile Leu Glu Leu Phe Ser Lys Val Pro Ser Leu Val Gly Ser Phe Ile

165

175

Lys Glu Phe Thr Lys Leu Glu Glu Val Leu Thr Asn Lys Lys Thr Thr  
195 200 205

Phe Phe Gly Gly Asn Ser Ile Ser Met Ile Asp Tyr Leu Ile Trp Pro  
210 215 220

Trp Phe Glu Arg Leu Glu Ala Met Lys Leu Asn Glu Cys Val Asp His  
225 230 235 240

Thr Pro Lys Leu Lys Leu Trp Met Ala Ala Met Lys Glu Asp Pro Thr  
245 250 255

Val Ser Ala Leu Leu Thr Ser Glu Lys Asp Trp Gln Gly Phe Leu Glu  
260 265 270

Leu Tyr Leu Gln Asn Ser Pro Glu Ala Cys Asp Tyr Gly Leu  
275 280 285

<210> 654

<211> 92

<212> PRT

<213> Homo sapiens

<400> 654

Ser Gln Ala Arg Gly Gln Gly Gln Gly Gly Arg Ser Trp Gly Ala Gly  
1 5 10 15

Ala Leu Gly Gln Ser Gly Pro Pro Pro Ala Ala Cys Pro Val Gly Leu  
20 25 30

Trp Lys Gly Ala Leu Gly Ser Arg Cys Trp Glu Pro Glu Leu Gly Arg  
35 40 45

Ala Trp Ala Gly Gly Val Pro Pro Ser His Lys Gly Trp Ala Glu Thr  
50 55 60

Gln Leu Ser Ala Ala Trp Arg Phe Pro Phe Trp Gly Gly Leu Arg Ser  
65 70 75 80

Cys His Leu Val Leu Cys Pro His Arg Asn Gln Arg  
85 90

665

&lt;210&gt; 655

&lt;211&gt; 281

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 655

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Pro Pro Leu Ala Pro Thr Ala Thr Ala Gly Thr Leu Ala Ala Ser Glu
 1             5             10             15

Gly Arg Trp Lys Ser Met Arg Lys Ser Pro Leu Gly Gly Gly Gly Gly
      20             25             30

Ser Gly Ala Ser Ser Gln Ala Ala Cys Leu Lys Gln Ile Leu Leu Leu
      35             40             45

Gln Leu Asp Leu Ile Glu Gln Gln Gln Gln Gln Leu Gln Ala Lys Glu
      50             55             60

Lys Glu Ile Glu Glu Leu Lys Ser Glu Arg Asp Thr Leu Leu Ala Arg
      65             70             75             80

Ile Glu Arg Met Glu Arg Arg Met Gln Leu Val Lys Lys Asp Asn Glu
      85             90             95

Lys Glu Arg His Lys Leu Phe Gln Gly Tyr Glu Thr Glu Glu Arg Glu
      100            105            110

Glu Thr Glu Leu Ser Glu Lys Ile Lys Leu Glu Cys Gln Pro Glu Leu
      115            120            125

Ser Glu Thr Ser Gln Thr Leu Pro Pro Lys Pro Phe Ser Cys Gly Arg
      130            135            140

Ser Gly Lys Gly His Lys Arg Lys Ser Pro Phe Gly Ser Thr Glu Arg
      145            150            155            160

Lys Thr Pro Val Lys Lys Leu Ala Pro Glu Phe Ser Lys Val Lys Thr
      165            170            175

Lys Thr Pro Lys His Ser Pro Ile Lys Glu Glu Pro Cys Gly Ser Leu
      180            185            190

Ser Glu Thr Val Cys Lys Arg Glu Leu Arg Ser Gln Glu Thr Pro Glu
      195            200            205

Lys Pro Arg Ser Ser Val Asp Thr Pro Pro Arg Leu Ser Thr Pro Gln
      210            215            220

Lys Gly Pro Ser Thr His Pro Lys Glu Lys Ala Phe Ser Ser Glu Ile
      225            230            235            240

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666

Glu Asp Leu Pro Tyr Leu Ser Thr Thr Glu Met Tyr Leu Cys Arg Trp  
                                   245                                  250                                  255

His Gln Pro Pro Pro Ser Pro Leu Pro Leu Arg Glu Ser Ser Pro Lys  
                                   260                                  265                                  270

Lys Glu Glu Thr Val Ala Ser Lys Ala  
                                   275                                  280

&lt;210&gt; 656

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (185)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 656

Glu Lys Lys Leu Ser Cys Leu Gln Ala Ala Val Thr Ala Ser Arg Thr  
   1                                  5                                  10                                  15

Leu Ser Ala Leu Leu Pro Thr Cys Thr Pro Gly Leu Ser Ile Pro Val  
                                   20                                  25                                  30

Pro Pro Asp Lys Arg Gly Gln Val Ser Gln Glu Leu Pro Pro Pro Cys  
                                   35                                  40                                  45

Ser Thr Ala Lys Lys Thr Pro Phe His Asp Phe Pro Pro Arg Pro Arg  
   50                                  55                                  60

Ser Tyr Leu Pro Thr Pro Leu Ser Glu Ser Pro Gly Thr His Arg Gly  
   65                                  70                                  75                                  80

Ala His His Ile Pro Leu Ser Thr Leu Pro Ala Ser Pro Thr Cys His  
                                   85                                  90                                  95

Pro Leu Pro Cys Pro Ser Pro Thr Pro Gln Leu Gln Glu Trp Lys Lys  
                                   100                                  105                                  110

Ser Pro Arg Ser Ser Gly Ser Pro Ser Pro His Pro Glu Leu Arg Leu  
   115                                  120                                  125

Gly Tyr Leu Leu Gln His Pro Cys Gln Asp Phe Ser Thr Leu Leu His  
   130                                  135                                  140

Thr Ser Arg Asp Arg Glu Leu Thr Thr Ser Gln Gly Ser Leu Leu Pro  
   145                                  150                                  155                                  160

667

Leu Asp Cys Ser Asp Phe Ser Ile Ser Leu Ile His Arg Arg Gly Phe  
                             165                            170                            175  
 Cys Phe Ser Val Ala Leu Ser Met Xaa Ser His Leu Pro Thr Leu Leu  
                             180                            185                            190  
 Pro Gly Val Leu Arg Ser His Ile Asp Ser Pro Glu Pro Ser Ser Leu  
                             195                            200                            205  
 Gln Ala Lys Glu Ser Arg Arg His Arg Gly His Phe Cys Cys Asn Lys  
                             210                            215                            220  
 Val Ser Cys Leu Phe Thr Val Arg Thr Phe Leu Ser Ile Pro Ser Arg  
                             225                            230                            235                            240  
 Leu Gly Gln Gly Asp Ser Gln Met His Thr His Lys Tyr Ser Val Leu  
                             245                            250                            255  
 Lys Leu

&lt;210&gt; 657

&lt;211&gt; 485

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (145)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 657

Ser Leu Ala Met Ala Ser Phe Ser Ala Glu Thr Asn Ser Thr Asp Leu  
     1                            5                            10                            15  
 Leu Ser Gln Pro Trp Asn Glu Pro Pro Val Ile Leu Ser Met Val Ile  
                             20                            25                            30  
 Leu Ser Leu Thr Phe Leu Leu Gly Leu Pro Gly Asn Gly Leu Val Leu  
                             35                            40                            45  
 Trp Val Ala Gly Leu Lys Met Gln Arg Thr Val Asn Thr Ile Trp Phe  
                             50                            55                            60  
 Leu His Leu Thr Leu Ala Asp Leu Leu Cys Cys Leu Ser Leu Pro Phe  
     65                            70                            75                            80  
 Ser Leu Ala His Leu Ala Leu Gln Gly Gln Trp Pro Tyr Gly Arg Phe

668

85																90								95							
Leu	Cys	Lys	Leu	Ile	Pro	Ser	Ile	Ile	Val	Leu	Asn	Met	Phe	Ala	Ser																
			100					105						110																	
Val	Phe	Leu	Leu	Thr	Ala	Ile	Ser	Leu	Asp	Arg	Cys	Leu	Val	Val	Phe																
			115					120						125																	
Lys	Pro	Ile	Trp	Cys	Gln	Asn	His	Arg	Asn	Val	Gly	Met	Ala	Cys	Ser																
			130					135						140																	
Xaa	Cys	Gly	Cys	Ile	Trp	Val	Val	Ala	Cys	Val	Met	Cys	Ile	Pro	Val																
145							150						155		160																
Phe	Val	Tyr	Arg	Glu	Ile	Phe	Thr	Thr	Asp	Asn	His	Asn	Arg	Cys	Gly																
			165							170			175																		
Tyr	Lys	Phe	Gly	Leu	Ser	Ser	Ser	Leu	Asp	Tyr	Pro	Asp	Phe	Tyr	Gly																
			180							185			190																		
Asp	Pro	Leu	Glu	Asn	Arg	Ser	Leu	Glu	Asn	Ile	Val	Gln	Pro	Pro	Gly																
			195							200			205																		
Glu	Met	Asn	Asp	Arg	Leu	Asp	Pro	Ser	Ser	Phe	Gln	Thr	Asn	Asp	His																
210							215						220																		
Pro	Trp	Thr	Val	Pro	Thr	Val	Phe	Gln	Pro	Gln	Thr	Phe	Gln	Arg	Pro																
225							230						235		240																
Ser	Ala	Asp	Ser	Leu	Pro	Arg	Gly	Ser	Ala	Arg	Leu	Thr	Ser	Gln	Asn																
			245							250			255																		
Leu	Tyr	Ser	Asn	Val	Phe	Lys	Pro	Ala	Asp	Val	Val	Ser	Pro	Lys	Ile																
			260							265			270																		
Pro	Ser	Gly	Phe	Pro	Ile	Glu	Asp	His	Glu	Thr	Ser	Pro	Leu	Asp	Asn																
			275							280			285																		
Ser	Asp	Ala	Phe	Leu	Ser	Thr	His	Leu	Lys	Leu	Phe	Pro	Ser	Ala	Ser																
290							295						300																		
Ser	Asn	Ser	Phe	Tyr	Glu	Ser	Glu	Leu	Pro	Gln	Gly	Phe	Gln	Asp	Tyr																
305							310						315		320																
Tyr	Asn	Leu	Gly	Gln	Phe	Thr	Asp	Asp	Asp	Gln	Val	Pro	Thr	Pro	Leu																
			325							330			335																		
Val	Ala	Ile	Thr	Ile	Thr	Arg	Leu	Val	Val	Gly	Phe	Leu	Leu	Pro	Ser																
			340							345			350																		
Val	Ile	Met	Ile	Ala	Cys	Tyr	Ser	Phe	Ile	Val	Phe	Arg	Met	Gln	Arg																

669

355                      360                      365  
 Gly Arg Phe Ala Lys Ser Gln Ser Lys Thr Phe Arg Val Ala Val Val  
     370                      375                      380  
 Val Val Ala Val Phe Leu Val Cys Trp Thr Pro Tyr His Ile Phe Gly  
     385                      390                      395                      400  
 Val Leu Ser Leu Leu Thr Asp Pro Glu Thr Pro Leu Gly Lys Thr Leu  
                     405                      410                      415  
 Met Ser Trp Asp His Val Cys Ile Ala Leu Ala Ser Ala Asn Ser Cys  
                     420                      425                      430  
 Phe Asn Pro Phe Leu Tyr Ala Leu Leu Gly Lys Asp Phe Arg Lys Lys  
                     435                      440                      445  
 Ala Arg Gln Ser Ile Gln Gly Ile Leu Glu Ala Ala Phe Ser Glu Glu  
                     450                      455                      460  
 Leu Thr Arg Ser Thr His Cys Pro Ser Asn Asn Val Ile Ser Glu Arg  
     465                      470                      475                      480  
 Asn Ser Thr Thr Val  
                     485

<210> 658  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 658  
 Gln Arg Tyr Val Ile Asn Pro Asn Ala Gln Pro Asn Cys Tyr Val Ile  
     1                      5                      10                      15  
 Pro Ile Pro Ile Leu Cys Asn Ile Cys Ser Phe Leu Glu Arg Gly Tyr  
                     20                      25                      30  
 Val Ser Arg Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu  
                     35                      40                      45  
 Ala Glu Ala Gly Gly Leu Pro Glu Val Arg Ser  
     50                      55

<210> 659  
 <211> 333  
 <212> PRT

670

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (186)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (260)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 659

Ser	Thr	Glu	Arg	Asp	Phe	Phe	Met	Arg	Met	Lys	Cys	Thr	Val	Thr	Asn
1				5					10					15	

Arg	Gly	Arg	Thr	Val	Asn	Leu	Lys	Ser	Ala	Thr	Trp	Lys	Val	Leu	His
			20				25						30		

Cys	Thr	Gly	Gln	Val	Lys	Val	Tyr	Asn	Asn	Cys	Pro	Pro	His	Asn	Ser
		35					40					45			

Leu	Cys	Gly	Tyr	Lys	Glu	Pro	Leu	Leu	Ser	Cys	Leu	Ile	Ile	Met	Cys
	50					55					60				

Glu	Pro	Ile	Gln	His	Pro	Ser	His	Met	Asp	Ile	Pro	Leu	Asp	Ser	Lys
65					70					75					80

Thr	Phe	Leu	Ser	Arg	His	Ser	Met	Asp	Met	Lys	Phe	Thr	Tyr	Cys	Asp
				85					90					95	

Asp	Arg	Ile	Thr	Glu	Leu	Ile	Gly	Tyr	His	Pro	Glu	Glu	Leu	Leu	Gly
			100					105					110		

Arg	Ser	Ala	Tyr	Glu	Phe	Tyr	His	Ala	Leu	Asp	Ser	Glu	Asn	Met	Thr
		115					120					125			

Lys	Ser	His	Gln	Asn	Leu	Cys	Thr	Lys	Gly	Gln	Val	Val	Ser	Gly	Gln
	130					135					140				

Tyr	Arg	Met	Leu	Ala	Lys	His	Gly	Gly	Tyr	Val	Trp	Leu	Glu	Thr	Gln
145					150					155					160

Gly	Thr	Val	Ile	Tyr	Asn	Pro	Arg	Asn	Leu	Gln	Pro	Gln	Cys	Ile	Met
				165					170					175	

Cys	Val	Asn	Tyr	Val	Leu	Ser	Glu	Ile	Xaa	Lys	Asn	Asp	Val	Val	Phe
		180						185					190		

Ser	Met	Asp	Gln	Thr	Glu	Ser	Leu	Phe	Lys	Pro	His	Leu	Met	Ala	Met
		195					200					205			



671

Asn Ser Ile Phe Asp Ser Ser Gly Lys Gly Ala Val Ser Glu Lys Ser  
 210 215 220  
 Asn Phe Leu Phe Thr Lys Leu Lys Glu Glu Pro Glu Glu Leu Ala Gln  
 225 230 235 240  
 Leu Ala Pro Thr Pro Gly Asp Ala Ile Ile Ser Leu Asp Phe Gly Asn  
 245 250 255  
 Gln Asn Phe Xaa Glu Ser Ser Ala Tyr Gly Lys Ala Ile Leu Pro Pro  
 260 265 270  
 Ser Gln Pro Trp Ala Thr Glu Leu Arg Ser His Ser Thr Gln Ser Glu  
 275 280 285  
 Leu Gly Ala Cys Leu Pro Ser Pro Cys Pro Arg Gln Leu Pro Arg Ala  
 290 295 300  
 Ala Pro Pro Pro Val Pro Pro Ala Ala Ala Ala Ala Ala Pro Arg Pro  
 305 310 315 320  
 Ile Ala Leu Lys Thr Ile Thr His Leu Trp Ile Thr Thr  
 325 330

&lt;210&gt; 660

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 660

Gln Ala Glu Ala Glu His Arg His Arg Pro Asp Arg Arg Ala Cys Cys  
 1 5 10 15  
 His Leu Pro Gly Arg Ala Val Thr Gly Met Asp Pro Val Ala Arg Arg  
 20 25 30  
 Leu Leu Trp Asp Thr Val Ala Arg Ala Arg Glu Ser Gly Lys Ala Ile  
 35 40 45  
 Ile Ile Thr Ser His Ser Met Glu Glu Cys Glu Ala Leu Cys Thr Arg  
 50 55 60  
 Leu Ala Ile Met Val Gln Gly Gln Phe Lys Cys Leu Gly Ser Pro Gln  
 65 70 75 80  
 His Leu Lys Ser Lys Phe Gly Ser Gly Tyr Ser Leu Arg Ala Lys Val  
 85 90 95

672

Gln Ser Glu Gly Gln Gln Glu Ala Leu Glu Glu Phe Lys Ala Phe Val  
                   100                  105                  110  
 Asp Leu Thr Phe Pro Gly Ser Val Leu Glu Asp Glu His Gln Gly Met  
           115                  120                  125  
 Val His Tyr His Leu Pro Gly Arg Asp Leu Ser Trp Ala Lys Val Phe  
       130                  135                  140  
 Gly Ile Leu Glu Lys Ala Lys Glu Lys Tyr Gly Val Asp Asp Tyr Ser  
 145                  150                  155                  160  
 Val Ser Gln Ile Ser Leu Glu Gln Val Phe Leu Ser Phe Ala His Leu  
                   165                  170                  175  
 Gln Pro Pro Thr Ala Glu Glu Gly Arg  
           180                  185

<210> 661  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<400> 661  
 Gly Arg Ala Pro Lys Glu Ala Glu Gly Ala Glu Asp Arg Gln Pro Ala  
   1                  5                  10                  15  
 Ser Arg Arg Gly Ala Gly Thr Thr Ala Ala Met Ala Ala Ser Gly Pro  
           20                  25                  30  
 Gly Cys Arg Ser Trp Cys Leu Cys Pro Glu Val Pro Ser Ala Thr Phe  
           35                  40                  45  
 Phe Thr Ala Leu Leu Ser Leu Leu Val Ser Gly Pro Arg Leu Phe Leu  
       50                  55                  60  
 Leu Gln Gln Pro Leu Ala Pro Ser Gly Leu Thr Leu Lys Ser Glu Ala  
   65                  70                  75                  80  
 Leu Arg Asn Trp Gln Val Tyr Arg Leu Val Thr Tyr Ile Phe Val Tyr  
           85                  90                  95  
 Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala Ile Ile Ile Trp Arg Phe  
       100                  105                  110  
 Ala Gly Asn Phe Glu Arg Thr Val Gly Thr Val Arg His Cys Phe Phe  
       115                  120                  125  
 Thr Val Ile Phe Ala Ile Phe Ser Ala Ile Ile Phe Leu Ser Phe Glu

130		135		140
Ala Val Ser Ser Leu Ser Lys Leu Gly Glu Val Glu Asp Ala Arg Gly				
145		150		155 160
Phe Thr Pro Val Ala Phe Ala Met Leu Gly Val Thr Thr Val Arg Ser				
	165		170	175
Arg Met Arg Arg Ala Leu Val Phe Gly Met Val Val Pro Ser Val Leu				
	180		185	190
Val Pro Trp Leu Leu Leu Gly Ala Ser Trp Leu Ile Pro Gln Thr Ser				
	195		200	205
Phe Leu Ser Asn Val Cys Gly Leu Ser Ile Gly Leu Ala Tyr Gly Cys				
	210		215	220
Thr Tyr Cys Tyr Ser Ile Asp Leu Ser Glu Arg Val Ala Leu Lys Leu				
	225		230	235 240
Asp Gln Thr Phe Pro Phe Ser Leu Met Arg Arg Ile Ser Val Phe Lys				
	245		250	255
Tyr Val Ser Gly Ser Ser Ala Glu Arg Arg Ala Ala Gln Ser Arg Lys				
	260		265	270
Leu Asn Pro Val Pro Gly Ser Tyr Pro Thr Gln Ser Cys His Pro His				
	275		280	285
Leu Ser Pro Ser His Pro Val Ser Gln Thr Gln His Ala Ser Gly Gln				
	290		295	300
Lys Leu Ala Ser Trp Pro Ser Cys Thr Pro Gly His Met Pro Thr Leu				
	305		310	315 320
Pro Pro Tyr Gln Pro Ala Ser Gly Leu Cys Tyr Val Gln Asn His Phe				
	325		330	335
Gly Pro Asn Pro Thr Ser Ser Ser Val Tyr Pro Ala Ser Ala Gly Thr				
	340		345	350
Ser Leu Gly Ile Gln Pro Pro Thr Pro Val Asn Ser Pro Gly Thr Val				
	355		360	365
Tyr Ser Gly Ala Leu Gly Thr Pro Gly Ala Ala Gly Ser Lys Glu Ser				
	370		375	380
Ser Arg Val Pro Met Pro				
385		390		

&lt;210&gt; 662

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 662

Glu	Leu	Tyr	Cys	Gly	Val	Leu	Pro	Arg	Ser	Pro	Trp	Phe	Leu	Ser	Glu
1				5					10					15	
Arg	Arg	Arg	Gln	Met	Ala	Asp	Phe	Asp	Thr	Tyr	Asp	Asp	Arg	Ala	Tyr
			20					25					30		
Ser	Ser	Phe	Gly	Gly	Gly	Arg	Gly	Ser	Arg	Gly	Ser	Ala	Gly	Gly	His
		35					40					45			
Gly	Ser	Arg	Ser	Gln	Lys	Glu	Leu	Pro	Thr	Glu	Pro	Pro	Tyr	Thr	Ala
	50					55					60				
Tyr	Val	Gly	Asn	Leu	Pro	Phe	Asn	Thr	Val	Gln	Gly	Asp	Ile	Asp	Ala
65					70					75					80
Ile	Phe	Lys	Asp	Leu	Ser	Ile	Arg	Ser	Val	Arg	Leu	Val	Arg	Asp	Lys
				85					90					95	
Asp	Thr	Asp	Lys	Phe	Lys	Gly	Phe	Cys	Tyr	Val	Glu	Phe	Asp	Glu	Val
			100					105					110		
Asp	Ser	Leu	Lys	Glu	Ala	Leu	Thr	Tyr	Asp	Gly	Ala	Leu	Leu	Gly	Asp
		115					120					125			
Arg	Ser	Leu	Arg	Val	Asp	Ile	Ala	Glu	Gly	Arg	Lys	Gln	Asp	Lys	Gly
		130				135					140				
Gly	Phe	Gly	Phe	Arg	Lys	Gly	Gly	Pro	Asp	Asp	Arg	Gly	Phe	Arg	Asp
145					150					155					160
Asp	Phe	Leu	Gly	Gly	Arg	Gly	Gly	Ser	Arg	Pro	Gly	Asp	Arg	Arg	Thr
				165					170					175	
Gly	Pro	Pro	Met	Gly	Ser	Arg	Phe	Arg	Asp	Gly	Pro	Pro	Leu	Arg	Gly
			180					185					190		
Ser	Asn	Met	Asp	Phe	Arg	Glu	Pro	Thr	Glu	Glu	Glu	Arg	Ala	Gln	Arg
		195					200					205			
Pro	Arg	Leu	Gln	Leu	Lys	Pro	Arg	Thr	Val	Ala	Thr	Pro	Leu	Asn	Gln
		210				215					220				
Val	Ala	Asn	Pro	Asn	Ser	Ala	Ile	Phe	Gly	Gly	Ala	Arg	Pro	Arg	Glu
225					230					235					240

675

Glu Val Val Gln Lys Glu Gln Glu  
245

<210> 663

<211> 616

<212> PRT

<213> Homo sapiens

<400> 663

Lys Glu Glu Glu Ile Val Asp Trp Trp Ser Lys Phe Tyr Ala Ser Ser  
1 5 10 15

Gly Glu His Glu Lys Cys Gly Gln Tyr Ile Gln Lys Gly Tyr Ser Lys  
20 25 30

Leu Lys Ile Tyr Asn Cys Glu Leu Glu Asn Val Ala Glu Phe Glu Gly  
35 40 45

Leu Thr Asp Phe Ser Asp Thr Phe Lys Leu Tyr Arg Gly Lys Ser Asp  
50 55 60

Glu Asn Glu Asp Pro Ser Val Val Gly Glu Phe Lys Gly Ser Phe Arg  
65 70 75 80

Ile Tyr Pro Leu Pro Asp Asp Pro Ser Val Pro Ala Pro Pro Arg Gln  
85 90 95

Phe Arg Glu Leu Pro Asp Ser Val Pro Gln Glu Cys Thr Val Arg Ile  
100 105 110

Tyr Ile Val Arg Gly Leu Glu Leu Gln Pro Gln Asp Asn Asn Gly Leu  
115 120 125

Cys Asp Pro Tyr Ile Lys Ile Thr Leu Gly Lys Lys Val Ile Glu Asp  
130 135 140

Arg Asp His Tyr Ile Pro Asn Thr Leu Asn Pro Val Phe Gly Arg Met  
145 150 155 160

Tyr Glu Leu Ser Cys Tyr Leu Pro Gln Glu Lys Asp Leu Lys Ile Ser  
165 170 175

Val Tyr Asp Tyr Asp Thr Phe Thr Arg Asp Glu Lys Val Gly Glu Thr  
180 185 190

Ile Ile Asp Leu Glu Asn Arg Phe Leu Ser Arg Phe Gly Ser His Cys  
195 200 205

Gly Ile Pro Glu Glu Tyr Cys Val Ser Gly Val Asn Thr Trp Arg Asp  
 210 215 220  
 Gln Leu Arg Pro Thr Gln Leu Leu Gln Asn Val Ala Arg Phe Lys Gly  
 225 230 235 240  
 Phe Pro Gln Pro Ile Leu Ser Glu Asp Gly Ser Arg Ile Arg Tyr Gly  
 245 250 255  
 Gly Arg Asp Tyr Ser Leu Asp Glu Phe Glu Ala Asn Lys Ile Leu His  
 260 265 270  
 Gln His Leu Gly Ala Pro Glu Glu Arg Leu Ala Leu His Ile Leu Arg  
 275 280 285  
 Thr Gln Gly Leu Val Pro Glu His Val Glu Thr Arg Thr Leu His Ser  
 290 295 300  
 Thr Phe Gln Pro Asn Ile Ser Gln Gly Lys Leu Gln Met Trp Val Asp  
 305 310 315 320  
 Val Phe Pro Lys Ser Leu Gly Pro Pro Gly Pro Pro Phe Asn Ile Thr  
 325 330 335  
 Pro Arg Lys Ala Lys Lys Tyr Tyr Leu Arg Val Ile Ile Trp Asn Thr  
 340 345 350  
 Lys Asp Val Ile Leu Asp Glu Lys Ser Ile Thr Gly Glu Glu Met Ser  
 355 360 365  
 Asp Ile Tyr Val Lys Gly Trp Ile Pro Gly Asn Glu Glu Asn Lys Gln  
 370 375 380  
 Lys Thr Asp Val His Tyr Arg Ser Leu Asp Gly Glu Gly Asn Phe Asn  
 385 390 395 400  
 Trp Arg Phe Val Phe Pro Phe Asp Tyr Leu Pro Ala Glu Gln Leu Cys  
 405 410 415  
 Ile Val Ala Lys Lys Glu His Phe Trp Ser Ile Asp Gln Thr Glu Phe  
 420 425 430  
 Arg Ile Pro Pro Arg Leu Ile Ile Gln Ile Trp Asp Asn Asp Lys Phe  
 435 440 445  
 Ser Leu Asp Asp Tyr Leu Gly Phe Leu Glu Leu Asp Leu Arg His Thr  
 450 455 460  
 Ile Ile Pro Ala Lys Ser Pro Glu Lys Cys Arg Leu Asp Met Ile Pro  
 465 470 475 480

677

Asp Leu Lys Ala Met Asn Pro Leu Lys Ala Lys Thr Ala Ser Leu Phe  
                             485                            490                            495  
 Glu Gln Lys Ser Met Lys Gly Trp Trp Pro Cys Tyr Ala Glu Lys Asp  
                             500                            505                            510  
 Gly Ala Arg Val Met Ala Gly Lys Val Glu Met Thr Leu Glu Ile Leu  
                             515                            520                            525  
 Asn Glu Lys Glu Ala Asp Glu Arg Pro Ala Gly Lys Gly Arg Asp Glu  
                             530                            535                            540  
 Pro Asn Met Asn Pro Lys Leu Asp Leu Pro Asn Arg Pro Glu Thr Ser  
                             545                            550                            555                            560  
 Phe Leu Trp Phe Thr Asn Pro Cys Lys Thr Met Lys Phe Ile Val Trp  
                             565                            570                            575  
 Arg Arg Phe Lys Trp Val Ile Ile Gly Leu Leu Phe Leu Leu Ile Leu  
                             580                            585                            590  
 Leu Leu Phe Val Ala Val Leu Leu Tyr Ser Leu Pro Asn Tyr Leu Ser  
                             595                            600                            605  
 Met Lys Ile Val Lys Pro Asn Val  
                             610                            615

<210> 664  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 664  
 Ala Arg Leu Phe Ser Gly Ala Ser Met Ser Met Ala Asp Arg His Gly  
   1                            5                            10                            15  
 Gln Gly Ala Val Phe Thr Ile Gly Leu Met Cys Ser Gln Leu Phe Ser  
                             20                            25                            30  
 Cys Trp Phe His Leu Asn Asn Gln Met Leu Val Leu Arg Pro Ser Met  
                             35                            40                            45  
 Ile Asp Ile Ile Ile His Phe Asp Pro Ser Cys Pro Ser Leu Ser Leu  
                             50                            55                            60  
 Ser Ser Pro Leu Cys Gly Phe Phe Leu Glu Thr Glu Arg Asn Pro Arg  
                             65                            70                            75                            80  
 Cys Trp His Gln Ala Tyr Ser Val Trp Pro Phe Gly Trp Thr Cys Tyr

678

				85					90					95			
Leu	Lys	Pro	Ser	Ala	Gln	Asn	Ile	Leu	Glu	Ser	Pro	His	Phe	Ser	Gly		
			100					105					110				
Leu	Leu	Lys	Leu	Tyr	Leu	Cys	Ile	Ile	Ala	Arg	Val	Val	His	Arg	Gln		
		115					120					125					
Arg	Arg	Ile	Arg	Leu	Phe	Ser	Phe										
		130				135											

<210> 665  
 <211> 78  
 <212> PRT  
 <213> Homo sapiens

<400> 665  
 Val Cys Pro His Pro Ala Met Ala Arg Leu Leu Gln Ala Ser Cys Leu  
   1                  5                  10                  15  
 Leu Ser Leu Leu Leu Ala Gly Phe Val Ser Gln Ser Arg Gly Gln Glu  
                   20                  25                  30  
 Lys Ser Lys Met Asp Cys His Gly Gly Ile Ser Gly Thr Ile Tyr Glu  
                   35                  40                  45  
 Tyr Gly Ala Leu Thr Ile Asp Gly Glu Glu Tyr Ile Pro Phe Lys Gln  
                   50                  55                  60  
 Tyr Ala Gly Lys Tyr Val Leu Phe Val Asn Val Ala Ser Tyr  
                   65                  70                  75

<210> 666  
 <211> 313  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (23)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 666  
 Ala Ala Met Ser Asn Pro Ser Ala Pro Pro Pro Tyr Glu Asp Arg Asn  
   1                  5                  10                  15  
 Pro Leu Tyr Pro Gly Pro Xaa Pro Pro Gly Gly Tyr Gly Gln Pro Ser



679

20	25	30
Val Leu Pro Gly Gly Tyr Pro Ala Tyr Pro Gly Tyr Pro Gln Pro Gly		
35	40	45
Tyr Gly His Pro Ala Gly Tyr Pro Gln Pro Met Pro Pro Thr His Pro		
50	55	60
Met Pro Met Asn Tyr Gly Pro Gly His Gly Tyr Asp Gly Glu Glu Arg		
65	70	75
Ala Val Ser Asp Ser Phe Gly Pro Gly Glu Trp Asp Asp Arg Lys Val		
85	90	95
Arg His Thr Phe Ile Arg Lys Val Tyr Ser Ile Ile Ser Val Gln Leu		
100	105	110
Leu Ile Thr Val Ala Ile Ile Ala Ile Phe Thr Phe Val Glu Pro Val		
115	120	125
Ser Ala Phe Val Arg Arg Asn Val Ala Val Tyr Tyr Val Ser Tyr Ala		
130	135	140
Val Phe Val Val Thr Tyr Leu Ile Leu Ala Cys Cys Gln Gly Pro Arg		
145	150	155
Arg Arg Phe Pro Trp Asn Ile Ile Leu Leu Thr Leu Phe Thr Phe Ala		
165	170	175
Met Gly Phe Met Thr Gly Thr Ile Ser Ser Met Tyr Gln Thr Lys Ala		
180	185	190
Val Ile Ile Ala Met Ile Ile Thr Ala Val Val Ser Ile Ser Val Thr		
195	200	205
Ile Phe Cys Phe Gln Thr Lys Val Asp Phe Thr Ser Cys Thr Gly Leu		
210	215	220
Phe Cys Val Leu Gly Ile Val Leu Leu Val Thr Gly Ile Val Thr Ser		
225	230	235
Ile Val Leu Tyr Phe Gln Tyr Val Tyr Trp Leu His Met Leu Tyr Ala		
245	250	255
Ala Leu Gly Ala Ile Cys Phe Thr Leu Phe Leu Ala Tyr Asp Thr Gln		
260	265	270
Leu Val Leu Gly Asn Arg Lys His Thr Ile Ser Pro Glu Asp Tyr Ile		
275	280	285
Thr Gly Ala Leu Gln Ile Tyr Thr Asp Ile Ile Tyr Ile Phe Thr Phe		

680

290                                      295                                      300  
 Val Leu Gln Leu Met Gly Asp Arg Asn  
 305                                      310  
  
 <210> 667  
 <211> 487  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 667  
 Pro Arg Gly Cys Trp Ser Ser Cys Leu Asp Ala Met Phe Arg Leu Asn  
   1                                      5                                      10                                      15  
  
 Ser Leu Ser Ala Leu Ala Glu Leu Ala Val Gly Ser Arg Trp Tyr His  
                                     20                                      25                                      30  
  
 Gly Gly Ser Gln Pro Ile Gln Ile Arg Arg Arg Leu Met Met Val Ala  
                                     35                                      40                                      45  
  
 Phe Leu Gly Ala Ser Ala Val Thr Ala Ser Thr Gly Leu Leu Trp Lys  
   50                                      55                                      60  
  
 Arg Ala His Ala Glu Ser Pro Pro Cys Val Asp Asn Leu Lys Ser Asp  
   65                                      70                                      75                                      80  
  
 Ile Gly Asp Lys Gly Lys Asn Lys Asp Glu Gly Asp Val Cys Asn His  
                                     85                                      90                                      95  
  
 Glu Lys Lys Thr Ala Asp Leu Ala Pro His Pro Glu Glu Lys Lys Lys  
                                     100                                      105                                      110  
  
 Lys Arg Ser Gly Phe Arg Asp Arg Lys Val Met Glu Tyr Glu Asn Arg  
                                     115                                      120                                      125  
  
 Ile Arg Ala Tyr Ser Thr Pro Asp Lys Ile Phe Arg Tyr Phe Ala Thr  
   130                                      135                                      140  
  
 Leu Lys Val Ile Ser Glu Pro Gly Glu Ala Glu Val Phe Met Thr Pro  
 145                                      150                                      155                                      160  
  
 Glu Asp Phe Val Arg Ser Ile Thr Pro Asn Glu Lys Gln Pro Glu His  
                                     165                                      170                                      175  
  
 Leu Gly Leu Asp Gln Tyr Ile Ile Lys Arg Phe Asp Gly Lys Lys Ile  
                                     180                                      185                                      190  
  
 Ser Gln Glu Arg Glu Lys Phe Ala Asp Glu Gly Ser Ile Phe Tyr Thr  
   195                                      200                                      205

Leu Gly Glu Cys Gly Leu Ile Ser Phe Ser Asp Tyr Ile Phe Leu Thr  
 210 215 220  
 Thr Val Leu Ser Thr Pro Gln Arg Asn Phe Glu Ile Ala Phe Lys Met  
 225 230 235 240  
 Phe Asp Leu Asn Gly Asp Gly Glu Val Asp Met Glu Glu Phe Glu Gln  
 245 250 255  
 Val Gln Ser Ile Ile Arg Ser Gln Thr Ser Met Gly Met Arg His Arg  
 260 265 270  
 Asp Arg Pro Thr Thr Gly Asn Thr Leu Lys Ser Gly Leu Cys Ser Ala  
 275 280 285  
 Leu Thr Thr Tyr Phe Phe Gly Ala Asp Leu Lys Gly Lys Leu Thr Ile  
 290 295 300  
 Lys Asn Phe Leu Glu Phe Gln Arg Lys Leu Gln His Asp Val Leu Lys  
 305 310 315 320  
 Leu Glu Phe Glu Arg His Asp Pro Val Asp Gly Arg Ile Thr Glu Arg  
 325 330 335  
 Gln Phe Gly Gly Met Leu Leu Ala Tyr Ser Gly Val Gln Ser Lys Lys  
 340 345 350  
 Leu Thr Ala Met Gln Arg Gln Leu Lys Lys His Phe Lys Glu Gly Lys  
 355 360 365  
 Gly Leu Thr Phe Gln Glu Val Glu Asn Phe Phe Thr Phe Leu Lys Asn  
 370 375 380  
 Ile Asn Asp Val Asp Thr Ala Leu Ser Phe Tyr His Met Ala Gly Ala  
 385 390 395 400  
 Ser Leu Asp Lys Val Thr Met Gln Gln Val Ala Arg Thr Val Ala Lys  
 405 410 415  
 Val Glu Leu Ser Asp His Val Cys Asp Val Val Phe Ala Leu Phe Asp  
 420 425 430  
 Cys Asp Gly Asn Gly Glu Leu Ser Asn Lys Glu Phe Val Ser Ile Met  
 435 440 445  
 Lys Gln Arg Leu Met Arg Gly Leu Glu Lys Pro Lys Asp Met Gly Phe  
 450 455 460  
 Thr Arg Leu Met Gln Ala Met Trp Lys Cys Ala Gln Glu Thr Ala Trp  
 465 470 475 480

682

Asp Phe Ala Leu Pro Lys Gln  
485

<210> 668

<211> 106

<212> PRT

<213> Homo sapiens

<400> 668

Gly Gly Val Gly Ala Glu Pro Asp Trp Ser Gly Gln Arg His Ala Gly  
1 5 10 15

Ala Val Pro Arg Ala Ser Pro Ala Val Ala Val Ala Val Ala Gly Pro  
20 25 30

Trp Gly Glu Asp Gly Phe Leu Arg Gly Arg Gly Val Arg Gln Pro Ala  
35 40 45

Ala Gln Pro Leu Ser Ser Pro Gln Asp Asp His Gly Arg Ala Ala Arg  
50 55 60

His Leu Arg Gln His Ala Gly Arg Val Ala Leu Leu Ala Cys Arg Ser  
65 70 75 80

Leu Ser Leu Arg Gly Arg Gln Gln Ser Gln Glu Ala Gly Met Lys Val  
85 90 95

Ala Leu Ser Pro Pro Gln Gly Ser Arg Thr  
100 105

<210> 669

<211> 105

<212> PRT

<213> Homo sapiens

<400> 669

Phe Gly Thr Ser Arg Arg Glu Thr Ser Val Val Pro Cys Arg Val Ala  
1 5 10 15

Ser Val Leu Arg Arg Pro Ser Pro Ser Phe Ala Ile Ala Arg His Arg  
20 25 30

Thr Pro Ser Leu Glu Ile Cys Arg His Leu Asp Phe Ser His Ala Val  
35 40 45

Cys Gln Val Ser Ala Ala Thr Arg Arg Gln Gly Ala Gly Pro Cys Gly

683

50                      55                      60  
 Leu Cys Cys Thr Ser Asp Gly Phe Ala Pro Ala Ser Ala Leu Ser Leu  
 65                      70                      75                      80  
 Leu Gln His Ser Asp Leu His Pro Leu Arg Gly Phe His Cys Pro Arg  
                     85                      90                      95  
 Gly Glu Asn Ala Pro Gly Ser Val Thr  
                     100                      105  
  
 <210> 670  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 670  
 Thr Gly Trp Ser His Arg Gly Lys Lys Met Ser Pro Arg Thr Pro Gly  
 1                      5                      10                      15  
 Phe Thr Pro Ser Pro Gln Arg Cys Leu His His Arg Cys Ser Thr Pro  
                     20                      25                      30  
 Ala Ala Ala Ala Ala Ser Ala Glu Cys Gly Pro Ser Gly Ala Thr Leu  
                     35                      40                      45  
 Ile Arg Ile Pro Leu His Arg Val Gln Pro Gly Arg Arg Ile Leu Asn  
 50                      55                      60  
 Leu Leu Arg Gly Trp Arg Glu Pro Ala Glu Leu Pro Lys Leu Gly Ala  
 65                      70                      75                      80  
 Pro Ser Pro Glu Asp Lys Pro Ile Phe Val Pro Leu Ser Asn Tyr Lys  
                     85                      90                      95  
 Gly Trp Leu His His Arg Phe Asp Pro Lys Ala Ser Thr Pro Ser Ser  
                     100                      105                      110  
 Gln Trp Asp Gln Phe Ala Ile Gln Tyr Gly Thr Gly Arg Val His Gly  
                     115                      120                      125  
 Ile Leu Ser Glu Asp Lys Leu Thr Ile Gly Gly Ile Lys Gly Ala Ser  
 130                      135                      140  
 Val Ile Phe Gly Glu Ala Leu Trp Glu Pro Ser Leu Val Phe Ala Phe  
 145                      150                      155                      160  
 Ala His Phe Asp Gly Ile Leu Gly Leu Gly Phe Pro Ile Leu Ser Val  
                     165                      170                      175

Glu Gly Val Arg Pro Pro Met Asp Val Leu Val Glu Gln Gly Leu Leu  
                   180                  185                  190  
 Asp Lys Pro Val Phe Ser Phe Tyr Leu Asn Arg Asp Pro Glu Glu Pro  
                   195                  200                  205  
 Asp Gly Gly Glu Leu Val Leu Gly Gly Ser Asp Pro Ala His Tyr Ile  
                   210                  215                  220  
 Pro Pro Leu Thr Phe Val Pro Val Thr Val Pro Ala Tyr Trp Gln Ile  
                   225                  230                  235                  240  
 His Met Glu Arg Val Lys Val Gly Pro Gly Leu Thr Leu Cys Ala Lys  
                   245                  250                  255  
 Gly Cys Ala Ala Ile Leu Asp Thr Gly Thr Ser Leu Ile Thr Gly Pro  
                   260                  265                  270  
 Thr Glu Glu Ile Arg Ala Leu His Ala Ala Ile Gly Gly  
                   275                  280                  285

&lt;210&gt; 671

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 671

Tyr Glu Glu Gln Ala Phe Gln Asp Leu Ser Gly Gly Asp Pro Pro Gly  
   1                  5                  10                  15  
 Gly Ser Thr Ser His Leu Met Trp Lys Arg Met Lys Asn Leu Arg Gly  
                   20                  25                  30  
 Gly Ser Cys Pro Leu Met Pro Asp Lys Pro Leu Ser Ala Asn Val Pro  
                   35                  40                  45  
 Asn Asp Lys Phe Thr Gln Asn Pro Met Arg Gly Leu Gly His Pro Leu  
                   50                  55                  60  
 Arg His Leu Pro Leu Pro Gln Pro Pro Ser Ala Ile Ser Pro Gly Glu  
   65                  70                  75                  80  
 Asn Ser Lys Ser Arg Phe Pro Pro Gln Cys Tyr Ala Thr Gln Tyr Gln  
                   85                  90                  95  
 Asp Tyr Ser Leu Ser Ser Ala His Lys Val Ser Gly Met Ala Ser Arg  
                   100                  105                  110

685

Leu Leu Gly Pro Ser Phe Glu Ser Tyr Leu Leu Pro Glu Leu Thr Arg  
 115 120 125

Tyr Asp Cys Glu Val Asn Val Pro Val Leu Gly Ser Ser Thr Leu Leu  
 130 135 140

Gln Gly Gly Asp Leu Leu Arg Ala Leu Asp Gln Ala Thr  
 145 150 155

<210> 672

<211> 307

<212> PRT

<213> Homo sapiens

<400> 672

His Tyr Val Gly Gly Ala Val Arg Arg Gly Arg Gly Gly Gly Ser Gly  
 1 5 10 15

Asn Gly Gly Gly Arg Arg Leu Gly Gly Arg Ala Gly Gly Ser His Gly  
 20 25 30

Gly Gly Asp Thr Gly Gly Ser Gly Gly Gly Gly Lys Arg Ser Arg Asp  
 35 40 45

Arg Gly Arg Asn Arg Val Trp Arg His Arg Arg Gly Ser Ala Glu Ser  
 50 55 60

Glu Gly Ala Lys Ile Asp Ala Ser Lys Asn Glu Glu Asp Glu Gly His  
 65 70 75 80

Ser Asn Ser Ser Pro Arg His Ser Glu Ala Ala Thr Ala Gln Arg Glu  
 85 90 95

Glu Trp Lys Met Phe Ile Gly Gly Leu Ser Trp Asp Thr Thr Lys Lys  
 100 105 110

Asp Leu Lys Asp Tyr Phe Ser Lys Phe Gly Glu Val Val Asp Cys Thr  
 115 120 125

Leu Lys Leu Asp Pro Ile Thr Gly Arg Ser Arg Gly Phe Gly Phe Val  
 130 135 140

Leu Phe Lys Glu Ser Glu Ser Val Asp Lys Val Met Asp Gln Lys Glu  
 145 150 155 160

His Lys Leu Asn Gly Lys Val Ile Asp Pro Lys Arg Ala Lys Ala Met  
 165 170 175

Lys Thr Lys Glu Pro Val Lys Lys Ile Phe Val Gly Gly Leu Ser Pro

```
<210> 673
<211> 248
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<400> 673
Pro Leu Arg Xaa Val Leu Val Glu Ser Ile Pro Glu Gly Leu Asp Phe
  1                      5              10                15

Pro Asn Ala Ser Thr Gly Asn Pro Ser Thr Ser Gln Ala Trp Leu Gly
      20                    25          30

Leu Leu Ala Gly Ala His Ser Ser Leu Asp Ile Ala Ser Phe Tyr Trp
    35              40            45

Thr Leu Thr Asn Asn Asp Thr His Thr Gln Glu Pro Ser Ala Gln Gln
   50        55           60
```



687

Gly Glu Glu Val Leu Arg Gln Leu Gln Thr Leu Ala Pro Lys Gly Val  
65 70 75 80

Asn Val Arg Ile Ala Val Ser Lys Pro Ser Gly Pro Gln Pro Gln Ala  
85 90 95

Asp Leu Gln Ala Leu Leu Gln Ser Gly Ala Gln Val Arg Met Val Asp  
100 105 110

Met Gln Lys Leu Thr His Gly Val Leu His Thr Lys Phe Trp Val Val  
115 120 125

Asp Gln Thr His Phe Tyr Leu Gly Ser Ala Asn Met Asp Trp Arg Ser  
130 135 140

Leu Thr Gln Val Lys Glu Leu Gly Val Val Met Tyr Asn Cys Ser Cys  
145 150 155 160

Leu Ala Arg Asp Leu Thr Lys Ile Phe Glu Ala Tyr Trp Phe Leu Gly  
165 170 175

Gln Ala Gly Ser Ser Ile Pro Ser Thr Trp Pro Arg Phe Tyr Asp Thr  
180 185 190

Arg Tyr Asn Gln Glu Thr Pro Met Glu Ile Cys Leu Asn Gly Thr Pro  
195 200 205

Ala Leu Ala Tyr Leu Ala Ser Ala Pro Pro Pro Leu Cys Pro Ser Gly  
210 215 220

Arg Thr Pro Asp Leu Lys Ala Leu Leu Asn Val Val Gly Gln Cys Pro  
225 230 235 240

Glu Phe His Leu Arg Arg Cys Ser  
245

&lt;210&gt; 674

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (89)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (144)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (290)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (291)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (302)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 674

Ala	Leu	Asp	Phe	Gly	Asp	Ser	Cys	Gln	Trp	Pro	Arg	Pro	Gln	Asp	Thr
1				5					10					15	

Met	Lys	Gln	Leu	Pro	Val	Leu	Glu	Pro	Gly	Asp	Lys	Pro	Arg	Lys	Ala
			20					25					30		

Thr	Trp	Tyr	Thr	Leu	Thr	Val	Pro	Gly	Asp	Ser	Pro	Cys	Ala	Arg	Val
		35					40					45			

Gly	His	Ser	Cys	Ser	Tyr	Leu	Pro	Pro	Val	Gly	Asn	Ala	Lys	Arg	Gly
	50					55					60				

Lys	Val	Phe	Ile	Val	Gly	Gly	Ala	Asn	Pro	Asn	Arg	Ser	Phe	Ser	Asp
65					70					75					80

Val	His	Thr	Met	Asp	Leu	Gly	Lys	Xaa	Gln	Trp	Asp	Leu	Asp	Thr	Cys
				85					90					95	

Lys	Gly	Leu	Leu	Pro	Arg	Tyr	Glu	His	Ala	Ser	Phe	Ile	Pro	Ser	Cys
		100					105						110		

Thr	Pro	Asp	Arg	Ile	Trp	Val	Phe	Gly	Gly	Ala	Asn	Gln	Ser	Gly	Asn
		115					120					125			

Arg	Asn	Cys	Leu	Gln	Val	Leu	Asn	Pro	Glu	Thr	Arg	Thr	Trp	Thr	Xaa
	130					135					140				

Pro	Glu	Val	Thr	Ser	Pro	Pro	Pro	Ser	Pro	Arg	Thr	Phe	His	Thr	Ser
145					150					155					160

Ser	Ala	Ala	Ile	Gly	Asn	Gln	Leu	Tyr	Val	Phe	Gly	Gly	Gly	Glu	Arg
			165						170					175	

689

Gly Ala Gln Pro Val Gln Asp Thr Lys Leu His Val Phe Asp Ala Asn  
                   180                  185                  190  
 Thr Leu Thr Trp Ser Gln Pro Glu Thr Leu Gly Asn Pro Pro Ser Pro  
                   195                  200                  205  
 Arg His Gly His Val Met Val Ala Ala Gly Thr Lys Leu Phe Ile His  
                   210                  215                  220  
 Gly Gly Leu Ala Gly Asp Arg Phe Tyr Asp Asp Leu His Cys Ile Asp  
                   225                  230                  235                  240  
 Ile Ser Gly His Glu Met Ala Gly Ser Leu Asn Pro Thr Gly Gly Leu  
                   245                  250                  255  
 Leu Pro Ala Gly Cys Ala Ala His Ser Ala Val Ala Met Gly Lys His  
                   260                  265                  270  
 Val Tyr Ile Phe Gly Gly Ile Asp Ser Cys Arg Ala Leu Asp Thr Cys  
                   275                  280                  285  
 Tyr Xaa Xaa His Thr Glu Glu Gln His Trp Thr Leu Leu Xaa Ile  
                   290                  295                  300

&lt;210&gt; 675

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 675

Leu Asp Lys Lys Lys Ser Asn Gln Met Cys Lys Asn Ser Gln Asp Ile  
   1                  5                  10                  15  
 Ile Cys Ser Asn Ala Gly Thr Cys His Cys Gly Arg Cys Lys Cys Asp  
                   20                  25                  30  
 Asn Ser Asp Gly Ser Gly Leu Val Tyr Gly Lys Phe Cys Glu Cys Asp  
                   35                  40                  45  
 Asp Arg Glu Cys Ile Asp Asp Glu Thr Glu Glu Ile Cys Gly Gly His  
                   50                  55                  60  
 Gly Lys Cys Tyr Cys Gly Asn Cys Tyr Cys Lys Ala Gly Trp His Gly  
                   65                  70                  75                  80  
 Asp Lys Cys Glu Phe Gln Cys Asp Ile Thr Pro Trp Glu Ser Lys Arg  
                   85                  90                  95  
 Arg Cys Thr Ser Pro Asp Gly Lys Ile Cys Ser Asn Arg Gly Thr Cys

690

100	105	110
Val Cys Gly Glu Cys Thr Cys His Asp Val Asp Pro Thr Gly Asp Trp		
115	120	125
Gly Asp Ile His Gly Asp Thr Cys Glu Cys Asp Glu Arg Asp Cys Arg		
130	135	140
Ala Val Tyr Asp Arg Tyr Ser Asp Asp Phe Cys Ser Gly His Gly Gln		
145	150	155
Cys Asn Cys Gly Arg Cys Asp Cys Lys Ala Gly Trp Tyr Gly Lys Lys		
165	170	175
Cys Glu His Pro Gln Ser Cys Thr Leu Ser Ala Glu Glu Ser Ile Arg		
180	185	190
Lys Cys Gln Gly Ser Ser Asp Leu Pro Cys Ser Gly Arg Gly Lys Cys		
195	200	205
Glu Cys Gly Lys Cys Thr Cys Tyr Pro Pro Gly Asp Arg Arg Val Tyr		
210	215	220
Gly Lys Thr Cys Glu Cys Asp Asp Arg Arg Cys Glu Asp Leu Asp Gly		
225	230	235
Val Val Cys Gly Gly His Gly Thr Cys Ser Cys Gly Arg Cys Val Cys		
245	250	255
Glu Arg Gly Trp Phe Gly Lys Leu Cys Gln His Pro Arg Lys Cys Asn		
260	265	270
Met Thr Glu Glu Gln Ser Lys Asn Leu Cys Glu Ser Ala Asp Gly Ile		
275	280	285
Leu Cys Ser Gly Lys Gly Ser Cys His Cys Gly Lys Cys Ile Cys Ser		
290	295	300
Ala Glu Glu Trp Tyr Ile Ser Gly Glu Phe Cys Asp Cys Asp Asp Arg		
305	310	315
Asp Cys Asp Lys His Asp Gly Leu Ile Cys Thr Gly Asn Gly Ile Cys		
325	330	335
Ser Cys Gly Asn Cys Glu Cys Trp Asp Gly Trp Asn Gly Asn Ala Cys		
340	345	350
Glu Ile Trp Leu Gly Ser Glu Tyr Pro		
355	360	

691

&lt;210&gt; 676

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 676

Gly Arg Ser Leu Arg Asn Thr Leu Pro Ala Cys Ala Lys Arg Lys Gln  
 1 5 10 15

Ala Pro Cys Phe Lys Lys Thr Arg Leu Thr Leu Val Cys Glu Ser Ala  
 20 25 30

Pro Gly Pro Ile Thr Met Asp Leu Thr Gly Asp Leu Glu Ala Leu Lys  
 35 40 45

Lys Glu Thr Ile Val Leu Lys Glu Gly Ser Glu Tyr Arg Val Lys Ile  
 50 55 60

His Phe Lys Val Asn Arg Asp Ile Val Ser Gly Leu Lys Tyr Val Gln  
 65 70 75 80

His Thr Tyr Arg Thr Gly Val Lys Val Asp Lys Ala Thr Phe Met Val  
 85 90 95

Gly Ser Tyr Gly Pro Arg Pro Glu Glu Tyr Glu Phe Leu Thr Pro Val  
 100 105 110

Glu Glu Ala Pro Lys Gly Met Leu Ala Arg Gly Thr Tyr His Asn Lys  
 115 120 125

Ser Phe Phe Thr Asp Asp Asp Lys Gln Asp His Leu Ser Trp Glu Trp  
 130 135 140

Asn Leu Ser Ile Lys Lys Glu Trp Thr Glu  
 145 150

&lt;210&gt; 677

&lt;211&gt; 270

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 677

Glu Glu Ala Ala Thr Pro Ser Gly Gly Gly Arg Asn Arg Ser Ala Ser  
 1 5 10 15

Ser Ser Trp Val Gly Thr Met Ala Gly Ile Thr Thr Ile Glu Ala Val  
 20 25 30

692

Lys Arg Lys Ile Gln Val Leu Gln Gln Gln Ala Asp Asp Ala Glu Glu  
           35                          40                          45  
 Arg Ala Glu Arg Leu Gln Arg Glu Val Glu Gly Glu Arg Arg Ala Arg  
           50                          55                          60  
 Glu Gln Ala Glu Ala Glu Val Ala Ser Leu Asn Arg Arg Ile Gln Leu  
           65                          70                          75                          80  
 Val Glu Glu Glu Leu Asp Arg Ala Gln Glu Arg Leu Ala Thr Ala Leu  
                           85                          90                          95  
 Gln Lys Leu Glu Glu Ala Glu Lys Ala Ala Asp Glu Ser Glu Arg Gly  
                           100                          105                          110  
 Met Lys Val Ile Glu Asn Arg Ala Leu Lys Asp Glu Glu Lys Met Glu  
           115                          120                          125  
 Leu Gln Glu Ile Gln Leu Lys Glu Ala Lys His Ile Ala Glu Glu Ala  
           130                          135                          140  
 Asp Arg Lys Tyr Glu Glu Val Ala Arg Lys Leu Val Ile Ile Glu Gly  
           145                          150                          155                          160  
 Asp Leu Glu Arg Thr Glu Glu Arg Ala Glu Leu Ala Glu Ser Arg Cys  
                           165                          170                          175  
 Arg Glu Met Asp Glu Gln Ile Arg Leu Met Asp Gln Asn Leu Lys Cys  
                           180                          185                          190  
 Leu Ser Ala Ala Glu Glu Lys Tyr Ser Gln Lys Glu Asp Lys Tyr Glu  
           195                          200                          205  
 Glu Glu Ile Lys Ile Leu Thr Asp Lys Leu Lys Glu Ala Glu Thr Arg  
           210                          215                          220  
 Ala Glu Phe Ala Glu Arg Ser Val Ala Lys Leu Glu Lys Thr Ile Asp  
           225                          230                          235                          240  
 Asp Leu Glu Asp Lys Leu Lys Cys Thr Lys Glu Glu His Leu Cys Thr  
                           245                          250                          255  
 Gln Arg Met Leu Asp Gln Thr Leu Leu Asp Leu Asn Glu Met  
           260                          265                          270

&lt;210&gt; 678

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (21)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (389)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (394)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 678  
 Xaa Xaa Pro Leu Thr Arg Leu Asn Leu Pro Ala Cys Arg Met Gly Ala  
   1                  5                  10                  15  
 Asp Trp Thr Thr Xaa Ser Leu Arg Ala Leu Ala Ala Xaa Ala Pro Ala  
                   20                  25                  30  
 Leu Glu Arg Glu Ser Glu Gly Thr Thr Gly Val Leu Xaa Trp Val Leu  
           35                  40                  45  
 Thr Pro Ala Leu Leu His Glu Arg Leu Ser Ser Gly Cys Val Gln Gly  
   50                  55                  60  
 Ile Thr Glu Leu Phe Cys Pro Asn Pro Glu Ala Tyr Gln Gly Leu Pro  
   65                  70                  75                  80

694

Thr	Leu	Pro	Pro	Ser	Thr	Leu	Ser	Val	Ala	Ala	Ala	Ala	Ala	Met	Ala	85	90	95
Gly	Met	Lys	Thr	Ala	Ser	Gly	Asp	Tyr	Ile	Asp	Ser	Ser	Trp	Glu	Leu	100	105	110
Arg	Val	Phe	Val	Gly	Glu	Glu	Asp	Pro	Glu	Ala	Glu	Ser	Val	Thr	Leu	115	120	125
Arg	Val	Thr	Gly	Glu	Ser	His	Ile	Gly	Gly	Val	Leu	Leu	Lys	Ile	Val	130	135	140
Glu	Gln	Ile	Asn	Arg	Lys	Gln	Asp	Trp	Ser	Asp	His	Ala	Ile	Trp	Trp	145	150	155
Glu	Gln	Lys	Arg	Gln	Trp	Leu	Leu	Gln	Thr	His	Trp	Thr	Leu	Asp	Lys	165	170	175
Tyr	Gly	Ile	Leu	Ala	Asp	Ala	Arg	Leu	Phe	Phe	Gly	Pro	Gln	His	Arg	180	185	190
Pro	Val	Ile	Leu	Arg	Leu	Pro	Asn	Arg	Arg	Ala	Leu	Arg	Leu	Arg	Ala	195	200	205
Ser	Phe	Ser	Gln	Pro	Leu	Phe	Gln	Ala	Val	Ala	Ala	Ile	Cys	Arg	Leu	210	215	220
Leu	Ser	Ile	Arg	His	Pro	Glu	Glu	Leu	Ser	Leu	Leu	Arg	Ala	Pro	Glu	225	230	235
Lys	Lys	Glu	Lys	Lys	Lys	Lys	Glu	Lys	Glu	Pro	Glu	Glu	Glu	Leu	Tyr	245	250	255
Asp	Leu	Ser	Lys	Val	Val	Leu	Ala	Gly	Gly	Val	Ala	Pro	Ala	Leu	Phe	260	265	270
Arg	Gly	Met	Pro	Ala	His	Phe	Ser	Asp	Ser	Ala	Gln	Thr	Glu	Ala	Cys	275	280	285
Tyr	His	Met	Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	290	295	300
Gln	Arg	Leu	Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	305	310	315
Ser	Arg	Trp	Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	325	330	335
Ala	Gly	Asp	Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	340	345	350



Leu Asp Pro Lys Thr Asp Pro Val Arg Leu Thr Gln Leu Tyr Glu Gln  
 355 360 365  
 Ala Arg Trp Asp Leu Leu Leu Glu Glu Ile Asp Cys Thr Glu Glu Glu  
 370 375 380  
 Met Met Val Phe Xaa Ala Leu Gln Asp Xaa Leu Thr Thr Ile Pro Glu  
 385 390 395 400  
 Leu Lys Asp His Leu Arg Ile Phe Arg Pro Arg Lys Leu Thr Leu Lys  
 405 410 415  
 Gly Tyr Arg Gln His Trp Val Val Phe Lys Glu Thr Thr Leu Ser Tyr  
 420 425 430  
 Tyr Lys Ser Gln Asp Glu Ala Pro Gly Asp Pro Ile Gln Gln Leu Asn  
 435 440 445  
 Leu Lys Gly Cys Glu Val Val Pro Asp Val Asn Val Ser Gly Gln Lys  
 450 455 460  
 Phe Cys Ile Lys Leu Leu Val Pro Ser Pro Glu Gly Met Ser Glu Ile  
 465 470 475 480  
 Tyr Leu Arg Cys Gln Asp Glu Gln Gln Tyr Ala Arg Trp Met Ala Gly  
 485 490 495  
 Cys Arg Leu Ala Ser Lys Gly Arg Thr Met Ala Asp Ser Ser Tyr Thr  
 500 505 510  
 Ser Glu Val Gln Ala Ile Leu Ala Phe Leu Ser Leu Gln Arg Thr Gly  
 515 520 525  
 Ser Gly Gly Pro Gly Asn His Pro His Gly Pro Asp Ala Ser Ala Glu  
 530 535 540  
 Gly Leu Asn Pro Tyr Gly Leu Val Ala Pro Arg Phe Gln Arg Lys Phe  
 545 550 555 560  
 Lys Ala Lys Gln Leu Thr Pro Arg Ile Leu Glu Ala His Gln Asn Val  
 565 570 575  
 Ala Gln Leu Ser Leu Ala Glu Ala Gln Leu Arg Phe Ile Gln Ala Trp  
 580 585 590  
 Gln Ser Leu Pro Asp Phe Gly Ile Ser Tyr Val Met Val Arg Phe Lys  
 595 600 605  
 Gly Ser Arg Lys Asp Glu Ile Leu Gly Ile Ala Asn Asn Arg Leu Ile  
 610 615 620

696

Arg Ile Asp Leu Ala Val Gly Asp Val Val Lys Thr Trp Arg Phe Ser  
 625                      630                      635                      640  
 Asn Met Arg Gln Trp Asn Val Asn Trp Asp Ile Arg Gln Val Ala Ile  
                     645                      650                      655  
 Glu Phe Asp Glu His Ile Asn Val Ala Phe Ser Cys Val Ser Ala Ser  
                     660                      665                      670  
 Cys Arg Ile Val His Glu Tyr Ile Gly Gly Tyr Ile Phe Leu Ser Thr  
                     675                      680                      685  
 Arg Glu Arg Ala Arg Gly Glu Glu Leu Asp Glu Asp Leu Phe Leu Gln  
                     690                      695                      700  
 Leu Thr Gly Gly His Glu Ala Phe  
 705                      710

&lt;210&gt; 679

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (179)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 679

Thr Val Lys Val Trp Ala Thr His Arg Gln Lys Phe Leu Phe Ser Leu  
   1                      5                      10                      15  
 Ser Gln His Ile Asn Trp Val Arg Cys Ala Lys Phe Ser Pro Asp Gly  
                     20                      25                      30  
 Arg Leu Ile Val Ser Ala Ser Asp Asp Lys Thr Val Lys Leu Trp Asp  
                     35                      40                      45  
 Lys Ser Ser Arg Glu Cys Val His Ser Tyr Cys Glu His Gly Gly Phe  
                     50                      55                      60  
 Val Thr Tyr Val Asp Phe His Pro Ser Gly Thr Cys Ile Ala Ala Ala  
   65                      70                      75                      80  
 Gly Met Asp Asn Thr Val Lys Val Trp Asp Val Arg Thr His Arg Leu  
                     85                      90                      95  
 Leu Gln His Tyr Gln Leu His Ser Ala Ala Val Asn Gly Leu Ser Phe

697

100 105 110  
His Pro Ser Gly Asn Tyr Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu  
115 120 125  
Lys Ile Leu Asp Leu Met Glu Gly Pro Ala Ala Leu His Thr Pro Arg  
130 135 140  
Gly Ile Arg Asp Gln Pro His Trp Pro Ser Ser Met Gly Asn Leu Pro  
145 150 155 160  
Glu Val Asp Phe Pro Val Pro Pro Arg Gln Lys Gln Gly Val Leu Glu  
165 170 175  
Ser Val Xaa

&lt;210&gt; 680

&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (28)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 680

Leu	Ala	Arg	Thr	Pro	Leu	Pro	Ser	Xaa	Xaa	Xaa	Phe	Xaa	Asn	Trp	Pro
1				5				10						15	

Xaa	Pro	Ala	Leu	Cys	Ser	Cys	Gly	Leu	Ile	Arg	Xaa	Xaa	Pro	Ala	Arg
			20					25						30	

His	Pro	Arg	Pro	Ala	Met	Ala	Ile	Tyr	Lys	Gln	Ser	Gln	His	Met	Thr
		35					40					45			

Glu	Val	Val	Arg	Arg	Cys	Pro	His	His	Glu	Arg	Cys	Ser	Asp	Ser	Asp
	50					55					60				

Gly	Leu	Ala	Pro	Pro	Gln	His	Leu	Ile	Arg	Val	Glu	Gly	Asn	Leu	Arg
65					70					75					80

Val	Glu	Tyr	Leu	Asp	Asp	Arg	Asn	Thr	Phe	Arg	His	Ser	Val	Val	Val
				85					90					95	

Pro	Tyr	Glu	Pro	Pro	Glu	Val	Gly	Ser	Asp	Cys	Thr	Thr	Ile	His	Tyr
			100					105					110		

Asn	Tyr	Met	Cys	Asn	Ser	Ser	Cys	Met	Gly	Gly	Met	Asn	Arg	Arg	Pro
		115					120					125			

Ile	Leu	Thr	Ile	Ile	Thr	Leu	Glu	Asp	Ser	Ser	Gly	Asn	Leu	Leu	Gly
	130					135					140				

Arg	Asn	Ser	Phe	Glu	Val	Arg	Val	Cys	Ala	Cys	Pro	Gly	Arg	Asp	Arg
145					150					155					160

Arg	Thr	Glu	Glu	Glu	Asn	Leu	Arg	Lys	Lys	Gly	Glu	Pro	His	His	Glu
				165					170					175	

Leu	Pro	Pro	Gly	Ser	Thr	Lys	Arg	Ala	Leu	Pro	Asn	Asn	Thr	Ser	Ser
			180					185					190		

Ser	Pro	Gln	Pro	Lys	Lys	Lys	Pro	Leu	Asp	Gly	Glu	Tyr	Phe	Thr	Leu
		195					200					205			

Gln	Ile	Arg	Gly	Arg	Glu	Arg	Phe	Glu	Met	Phe	Arg	Glu	Leu	Asn	Glu
	210					215						220			

699

Ala Leu Glu Leu Lys Asp Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser  
 225 230 235 240

Arg Ala His Ser Ser His Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser  
 245 250 255

Arg His Lys Lys Leu Met Phe Lys Thr Glu Gly Pro Asp Ser Asp  
 260 265 270

&lt;210&gt; 681

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 681

Gly Gln Val Arg Cys Leu Thr Ser Val Ile Pro Thr Leu Trp Glu Ala  
 1 5 10 15

Glu Met Gly Gly Leu Leu Glu Pro Arg Ser Ser Arg Pro Ala Trp Ala  
 20 25 30

Thr Gln Arg Asp Pro Ile Ser  
 35

&lt;210&gt; 682

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 682

Pro Pro Phe Tyr Leu Arg Ser Ile Phe Ile His Cys Ile Gly Asn Cys  
 1 5 10 15

Phe Met Leu Leu Gln Ser Ala Lys Ser Arg Ala Phe Ile Arg Pro Cys  
 20 25 30

His Thr Gln Glu Ser Thr Tyr Leu Lys Lys Lys Gln Phe Pro Glu Leu  
 35 40 45

Ser Thr Pro Ser Cys Arg Phe Gly Val Phe Leu Val Leu Thr Leu Lys  
 50 55 60

Ser His Val Leu Ile Phe Phe Leu Pro Val Phe Val Cys Lys Met Ser  
 65 70 75 80

Ser Ile Cys Tyr

700

&lt;210&gt; 683

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 683

Ala Phe Val Val Phe Ser Phe Asn Thr Cys Thr Ser Leu Leu Phe Glu  
1 5 10 15  
Lys Cys Tyr Ser Cys Gln Arg Ile Phe Met Asp Leu Lys Ile Ile Ser  
20 25 30  
Cys Glu Val Glu Cys Lys Cys Thr Val Ile His Ser Val Tyr Ile Lys  
35 40 45  
Ile Pro Gly Ile Phe Thr Phe Ala Thr Leu Ile  
50 55

&lt;210&gt; 684

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (265)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 684

Arg Asn Ser Arg Val Asp Pro Arg Val Arg Gly Ser Gln Gln Leu Pro  
1 5 10 15  
Leu Leu Cys Pro Ala Pro Gly Thr Arg Leu Phe Pro Leu Gln Cys Leu  
20 25 30  
Arg Gly Gly Asp Gly Ser Thr Met Asp Pro Arg Leu Ser Thr Val Arg  
35 40 45  
Gln Thr Cys Cys Cys Phe Asn Val Arg Ile Ala Thr Thr Ala Leu Ala  
50 55 60  
Ile Tyr His Val Ile Met Ser Val Leu Leu Phe Ile Glu His Ser Val  
65 70 75 80  
Glu Val Ala His Gly Lys Ala Ser Cys Lys Leu Ser Gln Met Gly Tyr  
85 90 95

701

Leu Arg Ile Ala Asp Leu Ile Ser Ser Phe Leu Leu Ile Thr Met Leu  
                   100                                  105                                  110  
 Phe Ile Ile Ser Leu Ser Leu Leu Ile Gly Val Val Lys Asn Arg Glu  
                   115                                  120                                  125  
 Lys Tyr Leu Leu Pro Phe Leu Ser Leu Gln Ile Met Asp Tyr Leu Leu  
                   130                                  135                                  140  
 Cys Leu Leu Thr Leu Leu Gly Ser Tyr Ile Glu Leu Pro Ala Tyr Leu  
                   145                                  150                                  155                                  160  
 Lys Leu Ala Ser Arg Ser Arg Ala Ser Ser Ser Lys Phe Pro Leu Met  
                                   165                                  170                                  175  
 Thr Leu Gln Leu Leu Asp Phe Cys Leu Ser Ile Leu Thr Leu Cys Ser  
                                   180                                  185                                  190  
 Ser Tyr Met Glu Val Pro Thr Tyr Leu Asn Phe Lys Ser Met Asn His  
                   195                                  200                                  205  
 Met Asn Tyr Leu Pro Ser Gln Glu Asp Met Pro His Asn Gln Phe Ile  
                   210                                  215                                  220  
 Lys Met Met Ile Ile Phe Ser Ile Ala Phe Ile Thr Val Leu Ile Phe  
                   225                                  230                                  235                                  240  
 Lys Val Tyr Met Phe Lys Cys Val Trp Arg Cys Tyr Arg Leu Ile Lys  
                                   245                                  250                                  255  
 Cys Met Asn Ser Val Glu Glu Lys Xaa Asn Ser Lys Met Leu Gln Lys  
                                   260                                  265                                  270  
 Val Val Leu Pro Ser Tyr Glu Glu Ala Leu Ser Leu Pro Ser Lys Thr  
                   275                                  280                                  285  
 Pro Glu Gly Gly Pro Ala Pro Pro Pro Tyr Ser Glu Val  
                   290                                  295                                  300

&lt;210&gt; 685

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

702

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (94)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 685

Glu	Gln	Cys	Trp	Trp	Gly	Gln	Ser	Leu	Gln	Arg	Leu	Gly	Trp	Gln	Pro
1				5					10					15	
Thr	Asn	Thr	Ser	Gly	Thr	Thr	Arg	Arg	Cys	Ala	Gly	Pro	Ser	Asn	Ser
			20					25					30		
Met	Gln	Leu	Ala	Ser	Arg	Ser	Ala	Gly	Glu	Leu	Val	Glu	Ser	Leu	Lys
		35					40					45			
Leu	Met	Ser	Leu	Cys	Leu	Gly	Ser	Gln	Leu	His	Gly	Ser	Thr	Lys	Tyr
	50					55					60				
Ile	Ile	Asp	Pro	Gln	Asn	Gly	Leu	Ser	Phe	Ser	Ser	Val	Lys	Val	Gln
65					70					75				80	
Glu	Lys	Xaa	Thr	Trp	Lys	Met	Cys	Ile	Ser	Ser	Thr	Gly	Xaa	Ala	Gly
				85					90					95	
Gln	Val	Pro	Gln	Trp	Ala	Ala									
				100											

&lt;210&gt; 686

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (145)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 686

Ala	Arg	Ala	Trp	Lys	His	Ile	Asp	Tyr	Phe	Asn	Asn	Gln	Ile	Ile	Val
1				5						10				15	
Asp	Leu	Val	Glu	Gln	Gln	His	Lys	Gly	Ile	Ile	Ala	Ile	Leu	Asp	Asp
			20					25					30		
Ala	Cys	Met	Asn	Val	Gly	Lys	Val	Thr	Asp	Glu	Met	Phe	Leu	Glu	Ala
		35					40					45			
Leu	Asn	Ser	Lys	Leu	Gly	Lys	His	Ala	His	Phe	Ser	Ser	Arg	Lys	Leu



703

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      50              55              60
Cys Ala Ser Asp Lys Ile Leu Glu Phe Asp Arg Asn Phe Arg Ile Arg
 65              70              75              80
His Tyr Ala Gly Asp Val Val Tyr Ser Val Ile Gly Phe Ile Asp Lys
      85              90              95
Asn Lys Asp Thr Leu Phe Gln Asp Phe Lys Arg Leu Met Tyr Asn Ser
      100              105              110
Ser Asn Pro Val Leu Lys Asn Met Trp Pro Glu Gly Lys Leu Ser Ile
      115              120              125
Thr Glu Val Thr Lys Arg Pro Leu Thr Ala Ala Thr Leu Phe Lys Asn
      130              135              140
Xaa Met Ile Ala Leu Val Asp Asn Leu Ala Ser Lys Glu Pro Tyr Tyr
 145              150              155              160
Val Arg Cys Ile Lys Pro Asn Asp Lys Lys Ser Pro Gln Ile Phe Asp
      165              170              175
Asp Glu Arg Cys Arg His Gln Val Glu Tyr Leu Gly Leu Leu Glu Asn
      180              185              190
Val Arg Val Arg Arg Ala Gly Phe Ala Phe Arg Gln Thr Tyr Glu Lys
      195              200              205
Phe Leu His Arg Tyr Lys Met Ile Ser Gly Ile Ala Pro Gly Pro Thr
      210              215              220
Met Asp Leu Pro Phe Arg Gln Arg Gly Cys Gln Glu Thr Asn Leu Asn
 225              230              235              240
Gly Val Val Phe Arg
      245

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&lt;210&gt; 687

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

704

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (67)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 687

Ser	Tyr	Tyr	Asn	Thr	Leu	Ile	Pro	Tyr	Cys	Gln	Cys	Leu	Phe	Ala	Ala
1					5				10					15	

Phe	Pro	His	Phe	Phe	Tyr	Ile	Ile	Xaa	Thr	Val	Leu	Ile	Phe	Phe	Cys
			20					25					30		

His	Trp	Asp	Cys	Leu	Ser	Asp	Thr	Leu	His	Xaa	Ser	Leu	Leu	Leu	Ala
		35					40					45			

Ile	Trp	Lys	Gly	Ser	Lys	Gly	Tyr	Ser	Gly	Gly	Ala	Xaa	Arg	Pro	Gly
	50					55					60				

Val	Trp	Xaa	Ile	Leu	Gln	Asn	Arg	Asn	Lys	Thr	Pro	Gln	Ser	Leu	Pro
65					70					75					80

Leu	Met	Pro	Ser	Ile	Gln	Leu	Phe	Cys	Cys	Ile	Ser	Cys	Leu	Leu	Phe
				85					90					95	

Lys	Lys	Leu	Pro
			100

&lt;210&gt; 688

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 688

Asp	Leu	Lys	Ile	Phe	Pro	Phe	Gln	Cys	Cys	Phe	Asn	Cys	Ile	Ser	Tyr
1				5					10					15	

Leu	Val	Phe	Leu	Ile	Asp	Ser	Thr	Val	Ile	Asn	His	Asn	Thr	Arg	Gln
			20					25					30		

Asn	Cys	Leu	Leu	Phe	Gln	Thr	Arg	Ala	Ile	Tyr	Met	Ser	Val	Tyr	Met
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

705

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          35              40              45
Gly Pro Thr Ala Ser Leu Arg Lys Cys Ile Ile Cys
  50              55              60

<210> 689
<211> 403
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 689
Ser Leu Ala Met Arg Asn Lys Lys Ile Leu Lys Glu Asp Glu Leu Leu
  1              5              10              15

Ser Glu Thr Gln Gln Ala Ala Phe His Gln Ile Ala Met Glu Pro Phe
      20              25              30

Glu Ile Asn Val Pro Lys Pro Lys Arg Arg Asn Gly Val Asn Phe Ser
      35              40              45

Leu Ala Val Val Val Ile Tyr Leu Ile Leu Leu Thr Ala Gly Ala Gly
      50              55              60

Leu Leu Val Val Gln Val Leu Asn Leu Gln Ala Arg Leu Arg Val Leu
      65              70              75              80

Glu Met Tyr Phe Leu Asn Asp Thr Leu Ala Ala Glu Asp Ser Pro Ser
      85              90              95

Phe Ser Leu Leu Gln Ser Ala His Pro Gly Glu His Leu Ala Gln Gly
      100             105             110

Ala Ser Arg Leu Gln Val Leu Gln Ala Gln Leu Thr Trp Val Arg Val
      115             120             125

Ser His Glu His Leu Leu Gln Arg Val Asp Asn Phe Thr Gln Asn Pro
      130             135             140

Gly Met Phe Arg Ile Lys Gly Glu Gln Gly Ala Pro Gly Leu Gln Gly
      145             150             155             160

His Lys Gly Ala Met Gly Met Pro Gly Ala Pro Gly Pro Pro Gly Pro
      165             170             175

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706

Pro Ala Glu Lys Gly Ala Xaa Gly Ala Met Gly Arg Asp Gly Ala Thr  
                   180                                  185                                  190

Gly Pro Ser Gly Pro Gln Gly Pro Pro Gly Val Lys Gly Glu Ala Gly  
                   195                                  200                                  205

Leu Gln Gly Pro Gln Gly Ala Pro Gly Lys Gln Gly Ala Thr Gly Thr  
                   210                                  215                                  220

Pro Gly Pro Gln Gly Glu Lys Gly Ser Lys Gly Asp Gly Gly Leu Ile  
                   225                                  230                                  235                                  240

Gly Pro Lys Gly Glu Thr Gly Thr Lys Gly Glu Lys Gly Asp Leu Gly  
                                   245                                  250                                  255

Leu Pro Gly Ser Lys Gly Asp Arg Gly Met Lys Gly Asp Ala Gly Val  
                                   260                                  265                                  270

Met Gly Pro Pro Gly Ala Gln Gly Ser Lys Gly Asp Phe Gly Arg Pro  
                   275                                  280                                  285

Gly Pro Pro Gly Leu Ala Gly Phe Pro Gly Ala Lys Gly Asp Gln Gly  
                   290                                  295                                  300

Gln Pro Gly Leu Gln Gly Val Pro Gly Pro Pro Gly Ala Val Gly His  
                   305                                  310                                  315                                  320

Pro Gly Ala Lys Gly Glu Pro Gly Ser Ala Gly Ser Pro Gly Arg Ala  
                                   325                                  330                                  335

Gly Leu Pro Gly Ser Pro Gly Ser Pro Gly Ala Thr Gly Leu Lys Gly  
                   340                                  345                                  350

Ser Lys Gly Asp Thr Gly Leu Gln Gly Gln Gln Gly Arg Lys Gly Glu  
                   355                                  360                                  365

Ser Gly Val Pro Gly Pro Ala Gly Val Lys Gly Glu Gln Gly Ser Pro  
                   370                                  375                                  380

Gly Leu Ala Gly Pro Lys Gly Ala Pro Gly Gln Ala Ala Arg Arg Glu  
                   385                                  390                                  395                                  400

Thr Arg Glu

&lt;210&gt; 690

&lt;211&gt; 494

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (271)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (462)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (463)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (482)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (483)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (490)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 690  
 Ser Arg Val Arg Lys Phe Pro Gly Arg Pro Thr Arg Pro Thr Glu Gln  
 1 5 10 15  
 Ile Arg Gln Asp Arg Ser Lys Gly Thr Val His Phe Ala Val Val Ile  
 20 25 30  
 Thr Asp Gly His Val Thr Gly Ser Pro Cys Gly Gly Ile Lys Leu Xaa  
 35 40 45  
 Ala Glu Arg Ala Arg Glu Glu Gly Ile Arg Leu Phe Ala Val Ala Pro  
 50 55 60  
 Asn Gln Asn Leu Lys Glu Gln Gly Leu Arg Asp Ile Ala Ser Thr Pro  
 65 70 75 80

His	Glu	Leu	Tyr	Arg	Asn	Asp	Tyr	Ala	Thr	Met	Leu	Pro	Asp	Ser	Thr	85	90	95
Glu	Ile	Asp	Gln	Asp	Thr	Ile	Asn	Arg	Ile	Ile	Lys	Val	Met	Lys	His	100	105	110
Glu	Ala	Tyr	Gly	Glu	Cys	Tyr	Lys	Val	Ser	Cys	Leu	Glu	Ile	Pro	Gly	115	120	125
Pro	Ser	Gly	Pro	Lys	Gly	Tyr	Arg	Gly	Gln	Lys	Gly	Ala	Lys	Gly	Asn	130	135	140
Met	Gly	Glu	Pro	Gly	Glu	Pro	Gly	Gln	Lys	Gly	Arg	Gln	Gly	Asp	Pro	145	150	155
Gly	Ile	Glu	Gly	Pro	Ile	Gly	Phe	Pro	Gly	Pro	Lys	Gly	Val	Pro	Gly	165	170	175
Phe	Lys	Gly	Glu	Lys	Gly	Glu	Phe	Gly	Ala	Asp	Gly	Arg	Lys	Gly	Ala	180	185	190
Pro	Gly	Leu	Ala	Gly	Lys	Asn	Gly	Thr	Asp	Gly	Gln	Lys	Gly	Lys	Leu	195	200	205
Gly	Arg	Ile	Gly	Pro	Pro	Gly	Cys	Lys	Gly	Asp	Pro	Gly	Asn	Arg	Gly	210	215	220
Pro	Asp	Gly	Tyr	Pro	Gly	Glu	Ala	Gly	Ser	Pro	Gly	Glu	Arg	Gly	Asp	225	230	235
Gln	Gly	Gly	Lys	Gly	Asp	Pro	Gly	Arg	Pro	Gly	Arg	Arg	Gly	Pro	Pro	245	250	255
Gly	Glu	Ile	Gly	Ala	Lys	Gly	Ser	Lys	Gly	Tyr	Gln	Gly	Asn	Xaa	Gly	260	265	270
Ala	Pro	Gly	Ser	Pro	Gly	Val	Lys	Gly	Ala	Lys	Gly	Gly	Pro	Gly	Pro	275	280	285
Arg	Gly	Pro	Lys	Gly	Glu	Pro	Gly	Arg	Arg	Gly	Asp	Pro	Gly	Thr	Lys	290	295	300
Gly	Ser	Pro	Gly	Ser	Asp	Gly	Pro	Lys	Gly	Glu	Lys	Gly	Asp	Pro	Gly	305	310	315
Pro	Glu	Gly	Pro	Arg	Gly	Leu	Ala	Gly	Glu	Val	Gly	Asn	Lys	Gly	Ala	325	330	335
Lys	Gly	Asp	Arg	Gly	Leu	Pro	Gly	Pro	Arg	Gly	Pro	Gln	Gly	Ala	Leu	340	345	350

<213> Homo sapiens

Tyr Gly Gly Tyr Leu Cys Leu Pro Arg Ser Ala Ala Val Ile Asn Asp  
65 70 75 80

Leu	His	Gly	Glu	Gly	Pro	Pro	Pro	Pro	Val	Pro	Pro	Ala	Gln	His	Pro	85	90	95
Asn	Pro	Cys	Pro	Pro	Gly	Tyr	Glu	Pro	Asp	Asp	Gln	Asp	Ser	Cys	Val	100	105	110
Asp	Val	Asp	Glu	Cys	Ala	Gln	Ala	Leu	His	Asp	Cys	Arg	Pro	Ser	Gln	115	120	125
Asp	Cys	His	Asn	Leu	Pro	Gly	Ser	Tyr	Gln	Cys	Thr	Cys	Pro	Asp	Gly	130	135	140
Tyr	Arg	Lys	Ile	Gly	Pro	Glu	Cys	Val	Asp	Ile	Asp	Glu	Cys	Arg	Tyr	145	150	155
Arg	Tyr	Cys	Gln	His	Arg	Cys	Val	Asn	Leu	Pro	Gly	Ser	Phe	Arg	Cys	165	170	175
Gln	Cys	Glu	Pro	Gly	Phe	Gln	Leu	Gly	Pro	Asn	Asn	Arg	Ser	Cys	Val	180	185	190
Asp	Val	Asn	Glu	Cys	Asp	Met	Gly	Ala	Pro	Cys	Glu	Gln	Arg	Cys	Phe	195	200	205
Asn	Ser	Tyr	Gly	Thr	Phe	Leu	Cys	Arg	Cys	His	Gln	Gly	Tyr	Glu	Leu	210	215	220
His	Arg	Asp	Gly	Phe	Ser	Cys	Ser	Asp	Ile	Asp	Glu	Cys	Ser	Tyr	Ser	225	230	235
Ser	Tyr	Leu	Cys	Gln	Tyr	Arg	Cys	Val	Asn	Glu	Pro	Gly	Arg	Phe	Ser	245	250	255
Cys	His	Cys	Pro	Gln	Gly	Tyr	Gln	Leu	Leu	Ala	Thr	Arg	Leu	Cys	Gln	260	265	270
Asp	Ile	Asp	Glu	Cys	Glu	Ser	Gly	Ala	His	Gln	Cys	Ser	Glu	Ala	Gln	275	280	285
Thr	Cys	Val	Asn	Phe	His	Gly	Gly	Tyr	Arg	Cys	Val	Asp	Thr	Asn	Arg	290	295	300
Cys	Val	Glu	Pro	Tyr	Ile	Gln	Val	Ser	Glu	Asn	Arg	Cys	Leu	Cys	Pro	305	310	315
Ala	Ser	Asn	Pro	Leu	Cys	Arg	Glu	Gln	Pro	Ser	Ser	Ile	Val	His	Arg	325	330	335
Tyr	Met	Thr	Ile	Thr	Ser	Glu	Arg	Ser	Val	Pro	Ala	Asp	Val	Phe	Gln	340	345	350



711

Ile Gln Ala Thr Ser Val Tyr Pro Gly Ala Tyr Asn Ala Phe Gln Ile  
 355 360 365

Arg Ala Gly Asn Ser Gln Gly Asp Phe Tyr Ile Arg Gln Ile Asn Asn  
 370 375 380

Val Ser Ala Met Leu Val Leu Ala Arg Pro Val Thr Gly Pro Arg Glu  
 385 390 395 400

Tyr Val Leu Asp Leu Glu Met Val Thr Met Asn Ser Leu Met Ser Tyr  
 405 410 415

Arg Ala Ser Ser Val Leu Arg Leu Thr Val Phe Val Gly Ala Tyr Thr  
 420 425 430

Phe

<210> 692  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 692  
 Leu Gln Arg Asp Leu Arg Glu Gly His Ala Asn Pro Thr Ala Asp Leu  
 1 5 10 15

Lys Ser Leu Ala Glu Leu Gly Asp Cys Asn Glu Asp Leu Glu Gln Val  
 20 25 30

Glu Lys Cys Met Leu Pro Glu Cys Pro Ile Asp Cys Glu Leu Thr Glu  
 35 40 45

Trp Ser Gln Trp Ser Glu Cys Asn Lys Ser Cys Gly Lys Gly His Val  
 50 55 60

Ile Arg Thr Arg Met Ile Gln Met Glu Pro Gln Phe Gly Gly Ala Pro  
 65 70 75 80

Cys Pro Glu Thr Val Gln Arg Lys Lys Cys Arg Ile Arg Lys Cys Leu  
 85 90 95

Arg Asn Pro Ser Ile Gln Lys Leu Arg Trp Arg Glu Ala Arg Glu Ser  
 100 105 110

Arg Arg Ser Glu Gln Leu Lys Glu Glu Ser Glu Gly Glu Gln Phe Pro  
 115 120 125

Gly Cys Arg Met Arg Pro Trp Thr Ala Trp Ser Glu Cys Thr Lys Leu

712

130                      135                      140  
 Cys Gly Gly Gly Ile Gln Glu Arg Tyr Met Thr Val Lys Lys Arg Phe  
 145                      150                      155                      160  
 Lys Ser Ser Gln Phe Thr Ser Cys Lys Asp Lys Lys Glu Ile Arg Ala  
                     165                      170                      175  
 Cys Asn Val His Pro Cys  
                     180

<210> 693  
 <211> 283  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (97)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 693  
 Ala Glu His Phe Pro Pro Gly Lys Tyr Arg Ile Ser Cys Pro Gly Gln  
   1                                  5                                  10                                  15  
 Glu Ser Asp Ala Gly Asp Arg Val Met Val Leu Asn Arg Ser Gly Met  
                   20                                  25                                  30  
 Trp Gln Glu Glu Val Thr Val Pro Ser Val Gln Thr Phe Leu Ile Pro  
                   35                                  40                                  45  
 Glu Ala Met Thr Phe Glu Glu Ala Ala Ala Leu Leu Val Asn Tyr Ile  
   50                                  55                                  60  
 Thr Ala Tyr Met Val Leu Phe Asp Phe Gly Asn Leu Gln Pro Gly His  
   65                                  70                                  75                                  80  
 Ser Val Leu Val His Met Ala Ala Gly Gly Val Gly Met Ala Ala Val  
                   85                                  90                                  95  
 Xaa Leu Cys Arg Thr Val Glu Asn Val Thr Val Phe Gly Thr Ala Ser  
                   100                                  105                                  110  
 Ala Ser Lys His Glu Ala Leu Lys Glu Asn Gly Val Thr His Pro Ile  
                   115                                  120                                  125  
 Asp Tyr His Thr Thr Asp Tyr Val Asp Glu Ile Lys Lys Ile Ser Pro  
   130                                  135                                  140

713

Lys Gly Val Asp Ile Val Met Asp Pro Leu Gly Gly Ser Asp Thr Ala  
145 150 155 160

Lys Gly Tyr Asn Leu Leu Lys Pro Met Gly Lys Val Val Thr Tyr Gly  
165 170 175

Met Ala Asn Leu Leu Thr Gly Pro Lys Arg Asn Leu Met Ala Leu Ala  
180 185 190

Arg Thr Trp Trp Asn Gln Phe Ser Val Thr Ala Leu Gln Leu Leu Gln  
195 200 205

Ala Asn Arg Ala Val Cys Gly Phe His Leu Gly Tyr Leu Asp Gly Glu  
210 215 220

Val Glu Leu Val Ser Gly Val Val Ala Arg Leu Leu Ala Leu Tyr Asn  
225 230 235 240

Gln Gly His Ile Lys Pro His Ile Asp Ser Val Trp Pro Phe Glu Lys  
245 250 255

Val Ala Asp Ala Met Lys Gln Met Gln Glu Lys Lys Asn Val Gly Lys  
260 265 270

Val Leu Leu Val Pro Gly Pro Glu Lys Glu Asn  
275 280

<210> 694

<211> 134

<212> PRT

<213> Homo sapiens

<400> 694

Gly Glu Ala Pro Asp Pro His Ala Ala Arg Thr Glu Leu Ser Ala Pro  
1 5 10 15

Leu Pro Ala Thr Ala Ser Arg Ala Ser Leu Ser Ser Asn Met Ala Lys  
20 25 30

Ile Ser Ser Pro Thr Glu Thr Glu Arg Cys Ile Glu Ser Leu Ile Ala  
35 40 45

Val Phe Gln Lys Tyr Ala Gly Lys Asp Gly Tyr Asn Tyr Thr Leu Ser  
50 55 60

Lys Thr Glu Phe Leu Ser Phe Met Asn Thr Glu Leu Ala Ala Phe Thr  
65 70 75 80

Lys Asn Gln Lys Asp Pro Gly Val Leu Asp Arg Met Met Lys Lys Leu

714

	85		90		95
Asp Thr Asn Ser Asp Gly Gln Leu Asp Phe Ser Glu Phe Leu Asn Leu					
	100		105		110
Ile Gly Gly Leu Ala Met Ala Cys His Asp Ser Phe Leu Lys Ala Val					
	115		120		125
Pro Ser Gln Lys Arg Thr					
	130				

&lt;210&gt; 695

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (111)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 695

Gly Ser Ser Glu Gly Ser Tyr Ser Ser Gln Thr Glu Thr Cys Pro Leu
1 5 10 15

Thr Pro Ser Leu Val Thr Gly Ser Met Phe Ala Gln Asn Phe Leu Arg
20 25 30

Gly Leu Ser Leu Gln Lys Ser Asn Leu Leu Pro Glu Cys Cys Leu Ala
35 40 45

Ser Glu Asn Leu Thr Leu Ser Phe Pro Ser Val Asn Gly His Arg Cys
50 55 60

Val Ala Gln Gly Ser Glu Thr Ser Glu Ser Arg Ala Gln Trp His Gly
65 70 75 80

Val Ala Leu Val Val Arg Lys Val Ile Gly Gln Leu Tyr Cys Lys Arg
85 90 95

Asn Lys Tyr Val Val Gln Phe Cys Lys Cys Gln Val Cys Ser Xaa Val
100 105 110

Leu

&lt;210&gt; 696

715

&lt;211&gt; 409

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (111)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (208)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 696

Gly	Glu	Arg	Glu	Gly	Gly	Asp	Cys	Lys	Gln	Asp	Ser	Leu	Val	Ile	Asn
1				5					10					15	

Leu	Asn	Arg	Ser	Asn	Pro	Lys	Leu	Lys	Asp	Leu	Tyr	Ile	Arg	Pro	Asn
			20					25					30		

Ile	Ala	Gln	Lys	Arg	Met	Gln	Gly	Ser	Leu	Glu	Ala	His	Val	Asn	Gly
		35					40					45			

Phe	Arg	Phe	Thr	Ser	Val	Arg	Gly	Asp	Lys	Val	Asp	Ile	Leu	Tyr	Asn
	50						55				60				

Asn	Ile	Lys	His	Ala	Leu	Phe	Gln	Pro	Cys	Asp	Gly	Glu	Met	Ile	Ile
65					70					75					80

Val	Leu	His	Phe	His	Leu	Lys	Asn	Ala	Ile	Met	Phe	Gly	Lys	Lys	Arg
				85					90					95	

His	Thr	Asp	Val	Gln	Phe	Tyr	Thr	Glu	Val	Gly	Glu	Ile	Thr	Xaa	Asp
		100						105					110		

Leu	Gly	Lys	His	Gln	His	Met	His	Asp	Arg	Asp	Asp	Leu	Tyr	Ala	Glu
	115						120					125			

Gln	Met	Glu	Arg	Glu	Met	Arg	His	Lys	Leu	Lys	Thr	Ala	Phe	Lys	Asn
	130					135					140				

Phe	Ile	Glu	Lys	Val	Glu	Ala	Leu	Thr	Lys	Glu	Glu	Leu	Glu	Phe	Glu
145					150					155					160

Val	Pro	Phe	Arg	Asp	Leu	Gly	Phe	Asn	Gly	Ala	Pro	Tyr	Arg	Ser	Thr
			165					170						175	

Cys	Leu	Leu	Gln	Pro	Thr	Ser	Ser	Ala	Leu	Val	Asn	Ala	Thr	Glu	Trp
			180					185					190		

716

Pro Pro Phe Val Val Thr Leu Asp Glu Val Glu Leu Ile His Phe Xaa  
 195 200 205  
 Arg Val Gln Phe His Leu Lys Asn Phe Asp Met Val Ile Val Tyr Lys  
 210 215 220  
 Asp Tyr Ser Lys Lys Val Thr Met Ile Asn Ala Ile Pro Val Ala Ser  
 225 230 235 240  
 Leu Asp Pro Ile Lys Glu Trp Leu Asn Ser Cys Asp Leu Lys Tyr Thr  
 245 250 255  
 Glu Gly Val Gln Ser Leu Asn Trp Thr Lys Ile Met Lys Thr Ile Val  
 260 265 270  
 Asp Asp Pro Glu Gly Phe Phe Glu Gln Gly Gly Trp Ser Phe Leu Glu  
 275 280 285  
 Pro Glu Gly Glu Gly Ser Asp Ala Glu Glu Gly Asp Ser Glu Ser Glu  
 290 295 300  
 Ile Glu Asp Glu Thr Phe Asn Pro Ser Glu Asp Asp Tyr Glu Glu Glu  
 305 310 315 320  
 Glu Glu Asp Ser Asp Glu Asp Tyr Ser Ser Glu Ala Glu Glu Ser Asp  
 325 330 335  
 Tyr Ser Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp  
 340 345 350  
 Asp Glu Leu Glu Glu Glu Ala Arg Lys Ala Asp Arg Glu Ser Arg Tyr  
 355 360 365  
 Glu Glu Glu Glu Glu Gln Ser Arg Ser Met Ser Arg Lys Arg Lys Ala  
 370 375 380  
 Ser Val His Ser Ser Gly Arg Gly Ser Asn Arg Gly Ser Arg His Ser  
 385 390 395 400  
 Ser Ala Pro Pro Lys Lys Lys Arg Lys  
 405

&lt;210&gt; 697

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 697

Asn Thr Gln Gly Leu Ile Phe Val Val Asp Ser Asn Asp Arg Glu Arg

717

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      1             5             10             15
Ile Gln Glu Val Ala Asp Glu Leu Gln Lys Met Leu Leu Val Asp Glu
      20             25             30
Leu Arg Asp Ala Val Leu Leu Leu Phe Ala Asn Lys Gln Asp Leu Pro
      35             40             45
Asn Ala Met Ala Ile Ser Glu Met Thr Asp Lys Leu Gly Leu Gln Ser
      50             55             60
Leu Arg Asn Arg Thr Trp Tyr Val Gln Ala Thr Cys Ala Thr Gln Gly
      65             70             75             80
Thr Gly Leu Tyr Glu Gly Leu Asp Trp Leu Ser Asn Glu Leu Ser Lys
      85             90             95

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Arg

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<210> 698
<211> 46
<212> PRT
<213> Homo sapiens

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<400> 698
Trp Tyr Pro Glu Val Arg His His Cys Pro Asn Thr Pro Ile Ile Leu
  1             5             10             15
Val Gly Thr Lys Leu Asp Leu Arg Asp Asp Lys Asp Thr Ile Glu Lys
      20             25             30
Leu Lys Glu Lys Lys Leu Thr Pro Ile Thr Tyr Pro Gln Val
      35             40             45

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<210> 699
<211> 126
<212> PRT
<213> Homo sapiens

```

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<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

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```

<400> 699
Pro His Thr Val Leu Val Glu Phe Ser Ser Val Val Ala Asp Thr Gln

```

718

1                      5                      10                      15  
 Glu Tyr Ile Ile Glu Xaa Thr Ala Asp Asp Ala Glu Thr Arg Glu Ala  
                          20                      25                      30  
 Thr Glu Ile Ile Glu Gly Thr Gln Thr Glu Val Asp Ser His Ile Met  
                          35                      40                      45  
 Lys Val Val Gln Gln Ile Val His Gln Ala Ser Ala Gly His Gln Ile  
                          50                      55                      60  
 Ile Val Gln Asn Val Thr Met Asp Glu Glu Thr Ala Leu Gly Pro Glu  
                          65                      70                      75                      80  
 Ala Ala Ala Ala Asp Thr Ile Thr Ile Ala Thr Pro Glu Ser Leu Thr  
    85                      90                      95  
 Glu Gln Val Ala Met Thr Leu Pro Arg Pro Ser Ala Arg Ala Leu Cys  
    100                      105                      110  
 Leu Pro Pro Gly Gln Gly Gln Val Ala Leu Asn Arg Pro Leu  
    115                      120                      125

&lt;210&gt; 700

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 700

Ala Thr Gln Gly Val Val Thr Tyr Tyr Leu Gln Glu Ser Gly Val Met  
    1                      5                      10                      15  
 Pro Tyr Leu Ser Gln Leu Gly Phe Asp Val Val Gly Tyr Gly Cys Met  
    20                      25                      30  
 Thr Cys Ile Gly Asn Ser Gly Pro Leu Pro Glu Pro Val Val Glu Ala  
    35                      40                      45  
 Ile Thr Gln Gly Asp Leu Val Ala Val Gly Val Leu Ser Gly Asn Arg  
    50                      55                      60  
 Asn Phe Glu Gly Arg Val His Pro Asn Thr Arg Ala Asn Tyr Leu Ala  
    65                      70                      75                      80  
 Ser Pro Pro Leu Val Ile Ala Tyr Ala Ile Ala Gly Thr Ile Arg Ile  
    85                      90                      95  
 Asp Phe Glu Lys Glu Pro Leu Gly Val Asn Ala Lys Gly Gln Gln Val  
    100                      105                      110



Phe	Leu	Lys	Asp	Ile	Trp	Pro	Thr	Arg	Asp	Glu	Ile	Gln	Ala	Val	Glu	115	120	125	
Arg	Gln	Tyr	Val	Ile	Pro	Gly	Met	Phe	Lys	Glu	Val	Tyr	Gln	Lys	Ile	130	135	140	
Glu	Thr	Val	Asn	Glu	Ser	Trp	Asn	Ala	Leu	Ala	Thr	Pro	Ser	Asp	Lys	145	150	155	160
Leu	Phe	Phe	Trp	Asn	Ser	Lys	Ser	Thr	Tyr	Ile	Lys	Ser	Pro	Pro	Phe	165	170	175	
Phe	Glu	Asn	Leu	Thr	Leu	Asp	Leu	Gln	Pro	Pro	Lys	Ser	Ile	Val	Asp	180	185	190	
Ala	Tyr	Val	Leu	Leu	Asn	Leu	Gly	Asp	Ser	Val	Thr	Thr	Asp	His	Ile	195	200	205	
Ser	Pro	Ala	Gly	Asn	Ile	Ala	Arg	Asn	Ser	Pro	Ala	Ala	Arg	Tyr	Leu	210	215	220	
Thr	Asn	Arg	Gly	Leu	Thr	Pro	Arg	Glu	Phe	Asn	Ser	Tyr	Gly	Ser	Arg	225	230	235	240
Arg	Gly	Asn	Asp	Ala	Val	Met	Ala	Arg	Gly	Thr	Phe	Ala	Asn	Ile	Arg	245	250	255	
Leu	Leu	Asn	Arg	Phe	Leu	Asn	Lys	Gln	Ala	Pro	Gln	Thr	Ile	His	Leu	260	265	270	
Pro	Ser	Gly	Glu	Ile	Leu	Asp	Val	Phe	Asp	Ala	Ala	Glu	Arg	Tyr	Gln	275	280	285	
Gln	Ala	Gly	Leu	Pro	Leu	Ile	Val	Leu	Ala	Gly	Lys	Glu	Tyr	Gly	Ala	290	295	300	
Gly	Ser	Ser	Arg	Asp	Trp	Ala	Ala	Lys	Gly	Pro	Phe	Leu	Leu	Gly	Ile	305	310	315	320
Lys	Ala	Val	Leu	Ala	Glu	Ser	Tyr	Glu	Arg	Ile	His	Arg	Ser	Asn	Leu	325	330	335	
Val	Gly	Met	Gly	Val	Ile	Pro	Leu	Glu	Tyr	Leu	Pro	Gly	Glu	Asn	Ala	340	345	350	
Asp	Ala	Leu	Gly	Leu	Thr	Gly	Gln	Glu	Arg	Tyr	Thr	Ile	Ile	Ile	Pro	355	360	365	
Glu	Asn	Leu	Lys	Pro	Gln	Met	Lys	Val	Gln	Val	Lys	Leu	Asp	Thr	Gly	370	375	380	

720

Lys Thr Phe Gln Ala Val Met Arg Phe Asp Thr Asp Val Glu Leu Thr  
 385 390 395 400

Tyr Phe Leu Asn Gly Gly Ile Leu Asn Tyr Met Ile Arg Lys Met Ala  
 405 410 415

Lys

<210> 701

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (145)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 701

Lys Ile Thr Val Ile Asn Cys Val Ile Gln Asn Ser Tyr Gln Ser Val  
 1 5 10 15

Leu Lys Leu Lys His Cys Lys Ser Gly Trp Gln Tyr Ser Val Leu Asn  
 20 25 30

Thr Phe Leu Ala Leu Val His Leu Arg Asn Glu Cys Ser Gly Gly Phe  
 35 40 45

Tyr Pro Arg Lys His Val Val Ile Arg Ile Val Gly Val Pro Ile Ile  
 50 55 60

Thr Ile Val Phe Cys Ile Leu Lys Lys Tyr Ser Pro His Phe Lys Cys  
 65 70 75 80

Phe Ile Leu Glu Asn Ser Leu Met His Thr Cys Gln Ile Tyr Ile Tyr  
 85 90 95

Ser Thr Asn Val Thr Phe Leu Phe Phe Val Leu Asp Val Arg Ala Cys  
 100 105 110

Ser Tyr Val Arg Tyr Leu His Lys Leu Leu His Tyr Phe Phe Leu Cys  
 115 120 125

Asn Thr Phe Leu Phe Val Tyr Val Val Gln Ile Tyr Ser Phe Leu Lys  
 130 135 140

Xaa

145

&lt;210&gt; 702

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 702

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Asp Phe Ser Asn Leu Gly Thr Thr His Leu Leu Arg Leu Thr Ser Ser
  1             5             10             15

Leu Thr Thr Lys Gly Ala Ser Ser Phe Lys Ile Thr Arg Gly Ile Glu
      20             25             30

Ala Val Gly Gly Lys Leu Ser Val Thr Ala Thr Arg Glu Asn Met Ala
      35             40             45

Tyr Thr Val Glu Cys Leu Arg Gly Asp Val Asp Ile Leu Met Glu Phe
  50             55             60

Leu Leu Asn Val Thr Thr Ala Pro Glu Phe Arg Arg Trp Glu Val Ala
  65             70             75             80

Asp Leu Gln Pro Gln Leu Lys Ile Asp Lys Ala Val Ala Phe Gln Asn
      85             90             95

Pro Gln Thr His Val Ile Glu Asn Leu His Ala Ala Ala Tyr Arg Asn
      100            105            110

Ala Leu Ala Asn Pro Leu Tyr Cys Pro Asp Tyr Arg Ile Gly Lys Val
      115            120            125

Thr Ser Glu Glu Leu His Tyr Phe Val Gln Asn His Phe Thr Ser Ala
      130            135            140

Arg Met Ala Leu Ile Gly Leu Gly Val Ser His Pro Val Leu Lys Gln
      145            150            155            160

Val Ala Glu Gln Phe Leu Asn Met Arg Gly Gly Leu Gly Leu Ser Gly
      165            170            175

Ala Lys Ala Asn Tyr Arg Gly Gly Glu Ile Arg Glu Gln Asn Gly Asp
      180            185            190

Ser Leu Val His Ala Ala Phe Val Ala Glu Ser Ala Val Ala Gly Ser
      195            200            205

Ala Glu Ala Asn Ala Phe Ser Val Leu Gln His Val Leu Gly Ala Gly
      210            215            220

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722

Pro His Val Lys Arg Gly Ser Asn Thr Thr Ser His Leu His Gln Ala  
 225 230 235 240  
 Val Ala Lys Ala Thr Gln Gln Pro Phe Asp Val Ser Ala Phe Asn Ala  
 245 250 255  
 Ser Tyr Ser Asp Ser Gly Leu Phe Gly Ile Tyr Thr Ile Ser Gln Ala  
 260 265 270  
 Thr Ala Ala Gly Asp Val Ile Lys Ala Ala Tyr Asn Gln Val Lys Thr  
 275 280 285  
 Ile Ala Gln Gly Asn Leu Ser Asn Thr Asp Val Gln Ala Ala Lys Asn  
 290 295 300  
 Lys Leu Lys Ala Gly Ile Pro Asn Val Ser Gly Val Phe  
 305 310 315

&lt;210&gt; 703

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (237)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 703

Lys Asp Leu Val Met Ala Thr Gly Leu Ser Glu His His Asn Met Val  
 1 5 10 15  
 Trp Glu Val Lys Thr Asn Gln Met Pro Asn Ala Val Gln Lys Leu Leu  
 20 25 30  
 Leu Val Met Asp Lys Arg Ala Ser Gly Met Asn Asp Ser Leu Glu Leu  
 35 40 45  
 Leu Gln Cys Asn Glu Asn Leu Pro Ser Ser Pro Gly Tyr Asn Ser Cys  
 50 55 60  
 Asp Glu His Met Glu Leu Asp Asp Leu Pro Glu Leu Gln Ala Val Gln  
 65 70 75 80  
 Ser Asp Pro Thr Gln Ser Gly Met Tyr Gln Leu Ser Ser Asp Val Ser  
 85 90 95  
 His Gln Glu Tyr Pro Arg Ser Ser Trp Asn Gln Asn Thr Ser Asp Ile

723

100	105	110
Pro Glu Thr Thr Tyr Arg Glu Asn Glu Val Asp Trp Leu Thr Glu Leu		
115	120	125
Ala Asn Ile Ala Thr Ser Pro Gln Ser Pro Leu Met Gln Cys Ser Phe		
130	135	140
Tyr Asn Arg Ser Ser Pro Val His Ile Ile Ala Thr Ser Lys Ser Leu		
145	150	155
His Ser Tyr Ala Arg Pro Pro Pro Val Ser Ser Ser Ser Lys Ser Glu		
165	170	175
Pro Ala Phe Pro His His His Trp Lys Glu Glu Thr Pro Val Arg His		
180	185	190
Glu Arg Ala Asn Ser Glu Ser Glu Ser Gly Ile Phe Cys Met Ser Ser		
195	200	205
Leu Ser Asp Asp Asp Asp Leu Gly Trp Cys Asn Ser Trp Pro Ser Thr		
210	215	220
Val Trp His Cys Phe Leu Lys Gly Thr Arg Leu Cys Xaa His Lys Gly		
225	230	235
Ser Asn Lys Glu Trp Gln Asp Val Glu Asp Phe Ala Arg Ala Glu Gly		
245	250	255
Cys Asp Asn Glu Glu Asp Leu Gln Met Gly Ile His Lys Gly Tyr Gly		
260	265	270
Ser Asp Gly Leu Lys Leu Leu Ser His Glu Glu Ser Val Ser Phe Gly		
275	280	285
Glu Ser Val Leu Lys Leu Thr Phe Asp Pro Gly Thr Val Glu Asp Gly		
290	295	300
Leu Leu Thr Val Glu Cys Lys Leu Asp His Pro Phe Tyr Val Lys Asn		
305	310	315
Lys Gly Trp Ser Ser Phe Tyr Pro Ser Leu Thr Val Val Gln His Gly		
325	330	335
Ile Pro Cys Cys Glu Ser Ser Tyr Trp Arg Cys Met Ser Thr Ser Trp		
340	345	350
Thr Pro Arg Cys His		
355		

724

&lt;210&gt; 704

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 704

Ser	His	Leu	Lys	Lys	Arg	Thr	Cys	Gly	Ser	Trp	Thr	Ala	Ser	Lys	Pro
1				5					10					15	

Phe	Leu	Ser	Val	Cys	Xaa	Val	Phe	Leu	Leu	Val	Pro	Leu	Leu	Pro	Pro
			20					25					30		

Leu	Gln	Asp	Phe	Arg	Gly	Thr	Pro	Thr	Ser	Leu	Cys	Pro	Ser	Ser	Leu
		35					40					45			

Cys	Pro	Ile	Arg	Trp	Gln	Gly	Xaa	Cys	Val	Glu	Arg	Pro	Gly	Arg	Cys
	50					55					60				

Arg	Asn	Gln	Ser	Pro	Gly	Gln	Trp	Cys	Leu	Ser	Ser	Pro	Ser	Leu	Cys
65					70					75					80

Pro	Cys	Ala	Pro	Ser	Cys	Pro	Arg	Leu	Gln	Pro	Arg	Pro	Trp	Thr	Cys
				85					90					95	

Ala	Pro	Val	Cys	Thr	Cys	Arg	His	Arg	Gly	Glu	Gly	Gly	Val	Phe	Leu
			100					105					110		

Gly	Leu	Pro	Gln	Thr	Leu	Pro	Leu	Ala	Ala	Ser	Leu	Pro	Cys	Leu	His
		115					120					125			

Ser	Ser	Thr	Ile	Thr	Ile	Ser	Pro	Lys	Leu	Leu	Leu	Thr	Gln	Ala	Lys
	130					135					140				

Ala	Ala	Ser	Gly	Leu	Pro	Ser	Thr	Ala	Leu	Leu	His	Leu	Ala	Tyr	His
145					150					155					160

Ser	Pro	Gly	Pro	Pro	Gly	Glu	Pro	Val	Leu	Cys	Ser	Leu	Cys	Phe	Arg
			165						170					175	

Leu	Val	Cys	Ala	Pro
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180

<210> 705

<211> 377

<212> PRT

<213> Homo sapiens

<400> 705

Ala Ala Ile Arg Gln Ala Leu Met Pro Val Ile Leu Gln Asp Ala Pro  
1 5 10 15

Ser Ala Pro Gly His Ala Pro His Arg Gln Ala Ser Leu Ser Ile Ser  
20 25 30

Val Ser Asn Ser Gln Ile Gln Glu Asn Val Asp Ile Ala Thr Val Tyr  
35 40 45

Gln Ile Phe Pro Asp Glu Val Leu Gly Ser Gly Gln Phe Gly Val Val  
50 55 60

Tyr Gly Gly Lys His Arg Lys Thr Gly Arg Asp Val Ala Val Lys Val  
65 70 75 80

Ile Asp Lys Leu Arg Phe Pro Thr Lys Gln Glu Ser Gln Leu Arg Asn  
85 90 95

Glu Val Ala Ile Leu Gln Ser Leu Arg His Pro Gly Ile Val Asn Leu  
100 105 110

Glu Cys Met Phe Glu Thr Pro Glu Lys Val Phe Val Val Met Glu Lys  
115 120 125

Leu His Gly Asp Met Leu Glu Met Ile Leu Ser Ser Glu Lys Gly Arg  
130 135 140

Leu Pro Glu Arg Leu Thr Lys Phe Leu Ile Thr Gln Ile Leu Val Ala  
145 150 155 160

Leu Arg His Leu His Phe Lys Asn Ile Val His Cys Asp Leu Lys Pro  
165 170 175

Glu Asn Val Leu Leu Ala Ser Ala Asp Pro Phe Pro Gln Val Lys Leu  
180 185 190

Cys Asp Phe Gly Phe Ala Arg Ile Ile Gly Glu Lys Ser Phe Arg Arg  
195 200 205

Ser Val Val Gly Thr Pro Ala Tyr Leu Ala Pro Glu Val Leu Leu Asn  
210 215 220

726

Gln Gly Tyr Asn Arg Ser Leu Asp Met Trp Ser Val Gly Val Ile Met  
 225 230 235 240  
 Tyr Val Ser Leu Ser Gly Thr Phe Pro Phe Asn Glu Asp Glu Asp Ile  
 245 250 255  
 Asn Asp Gln Ile Gln Asn Ala Ala Phe Met Tyr Pro Ala Ser Pro Trp  
 260 265 270  
 Ser His Ile Ser Ala Gly Ala Ile Asp Leu Ile Asn Asn Leu Leu Gln  
 275 280 285  
 Val Lys Met Arg Lys Arg Tyr Ser Val Asp Lys Ser Leu Ser His Pro  
 290 295 300  
 Trp Leu Gln Glu Tyr Gln Thr Trp Leu Asp Leu Arg Glu Leu Glu Gly  
 305 310 315 320  
 Lys Met Gly Glu Arg Tyr Ile Thr His Glu Ser Asp Asp Ala Arg Trp  
 325 330 335  
 Glu Gln Phe Ala Ala Glu His Pro Leu Pro Gly Ser Gly Leu Pro Thr  
 340 345 350  
 Asp Arg Asp Leu Gly Gly Ala Cys Pro Pro Gln Asp His Asp Met Gln  
 355 360 365  
 Gly Leu Ala Glu Arg Ile Ser Val Leu  
 370 375

&lt;210&gt; 706

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 706

Ser Arg Ala Pro Cys Pro Pro Thr Pro Gln Glu Gly Leu Asp Asp Gly  
 1 5 10 15  
 Pro Asp Phe Leu Ser Glu Glu Asp Arg Gly Leu Lys Ala Ile Asn Val  
 20 25 30  
 Asp Leu Gln Ser Asp Ala Ala Leu Gln Val Asp Ile Ser Asp Ala Leu  
 35 40 45  
 Ser Glu Arg Asp Lys Val Lys Phe Thr Val His Thr Lys Ser Ser Leu  
 50 55 60



Pro	Asn	Phe	Lys	Gln	Asn	Glu	Phe	Ser	Val	Val	Arg	Gln	His	Glu	Glu	65	70	75	80
Phe	Ile	Trp	Leu	His	Asp	Ser	Phe	Val	Glu	Asn	Glu	Asp	Tyr	Ala	Gly	85	90	95	
Tyr	Ile	Ile	Pro	Pro	Ala	Pro	Pro	Arg	Pro	Asp	Phe	Asp	Ala	Ser	Arg	100	105	110	
Glu	Lys	Leu	Gln	Lys	Leu	Gly	Glu	Gly	Glu	Gly	Ser	Met	Thr	Lys	Glu	115	120	125	
Glu	Phe	Thr	Lys	Met	Lys	Gln	Glu	Leu	Glu	Ala	Glu	Tyr	Leu	Ala	Ile	130	135	140	
Phe	Lys	Lys	Thr	Val	Ala	Met	His	Glu	Val	Phe	Leu	Cys	Arg	Val	Ala	145	150	155	160
Ala	His	Pro	Ile	Leu	Arg	Arg	Asp	Leu	Asn	Phe	His	Val	Phe	Leu	Glu	165	170	175	
Tyr	Asn	Gln	Asp	Leu	Ser	Val	Arg	Gly	Lys	Asn	Lys	Lys	Glu	Lys	Leu	180	185	190	
Glu	Asp	Phe	Phe	Lys	Asn	Met	Val	Lys	Ser	Ala	Asp	Gly	Val	Ile	Val	195	200	205	
Ser	Gly	Val	Lys	Asp	Val	Asp	Asp	Phe	Phe	Glu	His	Glu	Arg	Thr	Phe	210	215	220	
Leu	Leu	Glu	Tyr	His	Asn	Arg	Val	Lys	Asp	Ala	Ser	Ala	Lys	Ser	Asp	225	230	235	240
Arg	Met	Thr	Arg	Ser	His	Lys	Ser	Ala	Ala	Asp	Asp	Tyr	Asn	Arg	Ile	245	250	255	
Gly	Ser	Ser	Leu	Tyr	Ala	Leu	Gly	Thr	Gln	Asp	Ser	Thr	Asp	Ile	Cys	260	265	270	
Lys	Phe	Phe	Leu	Lys	Val	Ser	Glu	Leu	Phe	Asp	Lys	Thr	Arg	Lys	Ile	275	280	285	
Glu	Ala	Arg	Val	Ser	Ala	Asp	Glu	Asp	Leu	Lys	Leu	Ser	Asp	Leu	Leu	290	295	300	
Lys	Tyr	Tyr	Leu	Arg	Glu	Ser	Gln	Ala	Ala	Lys	Asp	Leu	Leu	Tyr	Arg	305	310	315	320
Arg	Ser	Arg	Ser	Leu	Val	Asp	Tyr	Glu	Asn	Ala	Asn	Lys	Ala	Leu	Asp	325	330	335	

728

Lys Ala Arg Ala Lys Asn Lys Asp Val Leu Gln Ala Glu Thr Ser Gln  
                   340                  345                  350

Gln Leu Cys Cys Gln Lys Phe Glu Lys Ile Ser Glu Ser Ala Lys Gln  
                   355                  360                  365

Glu Leu Ile Asp Phe Lys Thr Arg Arg Val Ala Ala Phe Arg Lys Asn  
                   370                  375                  380

Leu Val Glu Leu Ala Glu Leu Glu Leu Lys His Ala Lys Gly Asn Leu  
                   385                  390                  395                  400

Gln Leu Leu Gln Asn Cys Leu Ala Val Leu Asn Gly Asp Thr  
                   405                  410

&lt;210&gt; 707

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 707

Ala Arg Ala Glu Phe Gly Thr Arg Phe His Phe Pro Tyr Leu Leu Arg  
   1                  5                  10                  15

Ala Ser Thr Ser Phe Phe Ser Leu Cys Pro Phe Cys Phe Ser Gln Ser  
                   20                  25                  30

Pro Arg Ile Met Lys Val Ala Ser Gly Ser Thr Ala Thr Ala Ala Ala  
                   35                  40                  45

Gly Pro Ser Cys Ala Leu Lys Ala Gly Lys Thr Ala Ser Gly Ala Gly  
                   50                  55                  60

Glu Val Val Arg Cys Leu Ser Glu Gln Ser Val Ala Ile Ser Arg Cys  
                   65                  70                  75                  80

Ala Gly Gly Ala Gly Ala Arg Leu Pro Ala Leu Leu Asp Glu Gln Gln  
                   85                  90                  95

Val Asn Val Leu Leu Tyr Asp Met Asn Gly Cys Tyr Ser Arg Leu Lys  
                   100                  105                  110

Glu Leu Val Pro Thr Leu Pro Gln Asn Arg Lys  
                   115                  120

&lt;210&gt; 708

&lt;211&gt; 115

729

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 708

Gly Arg Glu Tyr Leu Val Pro Gln Gln Gly Arg Gln Phe Leu Ser Gln  
 1 5 10 15

Lys Thr Val Cys Ser Val Val Lys Ile Val Ala Cys Met Phe Ser Ser  
 20 25 30

Glu Arg Val Leu Leu Pro Tyr Ser Leu Ser Ala Ser Pro Ala Cys Ser  
 35 40 45

Cys Cys Met Val Ile Ala Leu Gly His Gln Ser Asn Asp Cys Lys Ser  
 50 55 60

Ala Trp Ile Phe Thr Cys Arg Gly Tyr Ser Cys Ile Val Arg Ser Pro  
 65 70 75 80

Ser Pro Ala Glu Ser Ser Leu His Trp Leu Ala Val Cys Cys Val Phe  
 85 90 95

His Ser Phe Gln Lys Ser Tyr Ile Val Ser Leu Asp Ile Phe Lys Asn  
 100 105 110

Cys Asp Phe  
 115

&lt;210&gt; 709

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (315)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 709

Gly Arg Arg Asp Gln Pro Pro Val Ser Ser Gly Arg Pro Pro Leu Trp  
 1 5 10 15

Gly Leu Arg Gly Met Met Glu Ala Leu Gly Phe Leu Lys Leu Glu Val  
 20 25 30

Asn Gly Pro Met Val Thr Val Ala Leu Ser Val Ala Leu Leu Ala Leu  
 35 40 45

Leu Lys Trp Tyr Ser Thr Ser Ala Phe Ser Arg Leu Glu Lys Leu Gly

730

50		55		60	
Leu Arg His Pro Lys Pro Ser Pro Phe Ile Gly Asn Leu Thr Phe Phe					
65		70		75	80
Arg Gln Gly Phe Trp Glu Ser Gln Met Glu Leu Arg Lys Leu Tyr Gly					
	85		90		95
Pro Leu Cys Gly Tyr Tyr Leu Gly Arg Arg Met Phe Ile Val Ile Ser					
	100		105		110
Glu Pro Asp Met Ile Lys Gln Val Leu Val Glu Asn Phe Ser Asn Phe					
	115		120		125
Thr Asn Arg Met Ala Ser Gly Leu Glu Phe Lys Ser Val Ala Asp Ser					
	130		135		140
Val Leu Phe Leu Arg Asp Lys Arg Trp Glu Glu Val Arg Gly Ala Leu					
145		150		155	160
Met Ser Ala Phe Ser Pro Glu Lys Leu Asn Glu Met Val Pro Leu Ile					
	165		170		175
Ser Gln Ala Cys Asp Leu Leu Leu Ala His Leu Lys Arg Tyr Ala Glu					
	180		185		190
Ser Gly Asp Ala Phe Asp Ile Gln Arg Cys Tyr Cys Asn Tyr Thr Thr					
	195		200		205
Asp Val Val Ala Ser Val Ala Phe Gly Thr Pro Val Asp Ser Trp Gln					
	210		215		220
Ala Pro Glu Asp Pro Phe Val Lys His Cys Lys Arg Phe Phe Glu Phe					
225		230		235	240
Cys Ile Pro Arg Pro Ile Leu Val Leu Leu Leu Ser Phe Pro Ser Ile					
	245		250		255
Met Val Pro Leu Ala Arg Ile Leu Pro Asn Lys Asn Arg Asp Glu Leu					
	260		265		270
Asn Gly Phe Phe Asn Lys Leu Ile Arg Asn Val Ile Cys Leu Ala Gly					
	275		280		285
Pro Ala Ser Cys Arg Arg Glu Ala Glu Arg Leu Pro Pro Asn Gly Pro					
	290		295		300
Gly Cys Pro Thr Phe Cys Lys Ser His Gly Xaa Ala Arg Leu					
305		310		315	

731

&lt;210&gt; 710

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (183)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 710

Gly	Cys	Leu	Gly	Lys	Arg	Met	Ile	Leu	Asn	Lys	Ala	Leu	Met	Leu	Gly
1				5					10					15	
Ala	Leu	Ala	Leu	Thr	Thr	Val	Met	Ser	Pro	Cys	Gly	Gly	Glu	Asp	Ile
			20					25					30		
Val	Ala	Asp	His	Val	Ala	Ser	Tyr	Gly	Val	Asn	Leu	Tyr	Gln	Ser	Tyr
		35					40					45			
Gly	Pro	Ser	Gly	Gln	Tyr	Thr	His	Glu	Phe	Asp	Gly	Asp	Glu	Gln	Phe
	50					55					60				
Tyr	Val	Asp	Leu	Gly	Arg	Lys	Glu	Thr	Val	Trp	Cys	Leu	Pro	Val	Leu
65					70					75					80
Arg	Gln	Phe	Arg	Phe	Asp	Pro	Gln	Phe	Ala	Leu	Thr	Asn	Ile	Ala	Val
				85					90					95	
Leu	Lys	His	Asn	Leu	Asn	Ser	Leu	Ile	Lys	Arg	Ser	Asn	Ser	Thr	Ala
			100					105					110		
Ala	Thr	Asn	Glu	Val	Pro	Glu	Val	Thr	Val	Phe	Ser	Lys	Ser	Pro	Val
		115					120					125			
Thr	Leu	Gly	Gln	Pro	Asn	Ile	Leu	Ile	Cys	Leu	Val	Asp	Asn	Ile	Phe
	130					135						140			
Pro	Pro	Val	Val	Asn	Ile	Thr	Trp	Leu	Ser	Asn	Gly	His	Ser	Val	Thr
145					150					155					160
Glu	Gly	Val	Ser	Glu	Thr	Ser	Phe	Leu	Ser	Lys	Ser	Asp	His	Ser	Phe
				165					170					175	
Phe	Lys	Ile	Ser	Tyr	Leu	Xaa	Leu	Pro	Pro	Phe	Cys				
			180					185							

&lt;210&gt; 711

732

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 711

Gly	Glu	Val	Leu	Arg	Arg	Gly	Lys	Ala	Glu	Leu	Glu	Glu	Gln	Lys	Arg	1	5	10	15
Leu	Leu	Asp	Arg	Thr	Val	Asp	Arg	Leu	Asn	Lys	Glu	Leu	Glu	Lys	Ile	20	25	30	
Gly	Glu	Asp	Ser	Lys	Gln	Ala	Leu	Gln	Gln	Leu	Gln	Ala	Gln	Leu	Glu	35	40	45	
Asp	Tyr	Lys	Glu	Lys	Ala	Arg	Arg	Glu	Val	Ala	Asp	Ala	Gln	Arg	Gln	50	55	60	
Ala	Lys	Asp	Trp	Ala	Ser	Glu	Ala	Glu	Lys	Thr	Ser	Gly	Gly	Leu	Ser	65	70	75	80
Arg	Leu	Gln	Asp	Xaa	Ile	Gln	Arg	Leu	Arg	Gln	Ala	Leu	Gln	Ala	Ser	85	90	95	
Gln	Ala	Glu	Arg	Asp	Thr	Ala	Arg	Leu	Asp	Lys	Glu	Leu	Leu	Ala	Gln	100	105	110	
Arg	Leu	Gln	Gly	Leu	Glu	Gln	Glu	Ala	Glu	Asn	Lys	Lys	Arg	Ser	Gln	115	120	125	
Asp	Asp	Arg	Ala	Arg	Gln	Leu	Lys	Gly	Leu	Glu	Glu	Lys	Val	Ser	Arg	130	135	140	
Leu	Glu	Thr	Glu	Leu	Asp	Glu	Glu	Lys	Asn	Thr	Val	Glu	Leu	Leu	Thr	145	150	155	160
Asp	Arg	Val	Asn	Arg	Gly	Arg	Asp	Gln	Val	Asp	Gln	Leu	Arg	Thr	Glu	165	170	175	
Leu	Met	Gln	Glu	Arg	Ser	Ala	Arg	Gln	Asp	Leu	Glu	Cys	Asp	Lys	Ile	180	185	190	
Ser	Leu	Glu	Arg	Gln	Asn	Lys	Asp	Leu	Lys	Thr	Arg	Leu	Ala	Ser	Ser	195	200	205	
Glu	Gly	Phe	Gln	Lys	Pro	Ser	Ala	Ser	Leu	Ser	Gln	Leu	Glu	Ser	Gln	210	215	220	

Asn Gln Leu Leu Gln Glu Arg Leu Gln Ala Glu Glu Arg Glu Lys Thr  
 225 230 235 240  
 Val Leu Gln Ser Thr Asn Arg Lys Leu Glu Arg Lys Val Lys Glu Leu  
 245 250 255  
 Ser Ile Gln Ile Glu Asp Glu Arg Gln His Val Asn Asp Gln Lys Asp  
 260 265 270  
 Gln Leu Ser Leu Arg Val Lys Ala Leu Lys Arg Gln Val Asp Glu Ala  
 275 280 285  
 Glu Glu Glu Ile Glu Arg Leu Asp Gly Leu Arg Lys Lys Ala Gln Arg  
 290 295 300  
 Glu Val Glu Glu Gln His Glu Val Asn Glu Gln Leu Gln Ala Arg Ile  
 305 310 315 320  
 Lys Ser Leu Glu Lys Asp Ser Trp Arg Lys Ala Ser Arg Ser Ala Ala  
 325 330 335  
 Glu Ser Ala Leu Lys Asn Glu Gly Leu Ser Ser Asp Glu Glu Phe Asp  
 340 345 350  
 Ser Val Tyr Asp Pro Ser Ser Ile Ala Ser Leu Leu Thr Glu Ser Asn  
 355 360 365  
 Leu Gln Thr Ser Ser Cys  
 370

&lt;210&gt; 712

&lt;211&gt; 413

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 712

Gly Gly Phe Gly Leu Leu Gly Phe Leu Ser Ala Leu Leu Ala Leu Val  
 1 5 10 15  
 Leu Arg Ala Arg Ala Gly Ser Gln Thr Pro Gln Thr Leu Leu Leu Pro  
 20 25 30  
 Ala Ala Ala Phe Arg Arg Gly Glu Thr Pro Arg Phe Lys Met Ser Leu  
 35 40 45  
 Phe Gly Thr Thr Ser Gly Phe Gly Thr Ser Gly Thr Ser Met Phe Gly  
 50 55 60

Ser	Ala	Thr	Thr	Asp	Asn	His	Asn	Pro	Met	Lys	Asp	Ile	Glu	Val	Thr		
65					70					75					80		
Ser	Ser	Pro	Asp	Asp	Ser	Ile	Gly	Cys	Leu	Ser	Phe	Ser	Pro	Pro	Thr		
				85					90					95			
Leu	Pro	Gly	Asn	Phe	Leu	Ile	Ala	Gly	Ser	Trp	Ala	Asn	Asp	Val	Arg		
			100					105					110				
Cys	Trp	Glu	Val	Gln	Asp	Ser	Gly	Gln	Thr	Ile	Pro	Lys	Ala	Gln	Gln		
		115					120					125					
Met	His	Thr	Gly	Pro	Val	Leu	Asp	Val	Cys	Trp	Ser	Asp	Asp	Gly	Ser		
	130					135					140						
Lys	Val	Phe	Thr	Ala	Ser	Cys	Asp	Lys	Thr	Ala	Lys	Met	Trp	Asp	Leu		
145					150					155					160		
Ser	Ser	Asn	Gln	Ala	Ile	Gln	Ile	Ala	Gln	His	Asp	Ala	Pro	Val	Lys		
			165						170					175			
Thr	Ile	His	Trp	Ile	Lys	Ala	Pro	Asn	Tyr	Ser	Cys	Val	Met	Thr	Gly		
			180						185				190				
Ser	Trp	Asp	Lys	Thr	Leu	Lys	Phe	Trp	Asp	Thr	Arg	Ser	Ser	Asn	Pro		
		195					200					205					
Met	Met	Val	Leu	Gln	Leu	Pro	Glu	Arg	Cys	Tyr	Cys	Ala	Asp	Val	Ile		
	210					215					220						
Tyr	Pro	Met	Ala	Val	Val	Ala	Thr	Ala	Glu	Arg	Gly	Leu	Ile	Val	Tyr		
225					230					235					240		
Gln	Leu	Glu	Asn	Gln	Pro	Ser	Glu	Phe	Arg	Arg	Ile	Glu	Ser	Pro	Leu		
			245						250					255			
Lys	His	Gln	His	Arg	Cys	Val	Ala	Ile	Phe	Lys	Asp	Lys	Gln	Asn	Lys		
			260					265					270				
Pro	Thr	Gly	Phe	Ala	Leu	Gly	Ser	Ile	Glu	Gly	Arg	Val	Ala	Ile	His		
		275					280					285					
Tyr	Ile	Asn	Pro	Pro	Asn	Pro	Ala	Lys	Asp	Asn	Phe	Thr	Phe	Lys	Cys		
	290					295					300						
His	Arg	Ser	Asn	Gly	Thr	Asn	Thr	Ser	Ala	Pro	Gln	Asp	Ile	Tyr	Ala		
305					310					315					320		
Val	Asn	Gly	Ile	Ala	Phe	His	Pro	Val	His	Gly	Thr	Leu	Ala	Thr	Val		
				325					330					335			



735

Gly Ser Asp Gly Arg Phe Ser Phe Trp Asp Lys Asp Ala Arg Thr Lys  
                   340                                  345                                  350  
 Leu Lys Thr Ser Glu Gln Leu Asp Gln Pro Ile Ser Ala Cys Cys Phe  
                   355                                  360                                  365  
 Asn His Asn Gly Asn Ile Phe Ala Tyr Ala Ser Ser Tyr Asp Trp Ser  
                   370                                  375                                  380  
 Lys Gly His Glu Phe Tyr Asn Pro Gln Lys Lys Asn Tyr Ile Phe Leu  
 385                                  390                                  395                                  400  
 Arg Asn Ala Ala Glu Glu Leu Lys Pro Arg Asn Lys Lys  
                                   405                                  410

<210> 713  
 <211> 374  
 <212> PRT  
 <213> Homo sapiens

<400> 713  
 Ser Thr His Ala Ser Ala His Ala Ser Gly Pro Thr Arg Pro Gly Ala  
   1                                  5                                  10                                  15  
 Trp Ser Ala Ala Ala Ala Gly Pro Gly Ala Gly Ala Ala Ala Ala Ala  
                   20                                  25                                  30  
 Thr Gly Gly Gly Gly Gly Ala Leu Glu Ala Ala Met Ala Lys Gln Tyr  
                   35                                  40                                  45  
 Asp Ser Val Glu Cys Pro Phe Cys Asp Glu Val Ser Lys Tyr Glu Lys  
                   50                                  55                                  60  
 Leu Ala Lys Ile Gly Gln Gly Thr Phe Gly Glu Val Phe Lys Ala Arg  
   65                                  70                                  75                                  80  
 His Arg Lys Thr Gly Gln Lys Val Ala Leu Lys Lys Val Leu Met Glu  
                   85                                  90                                  95  
 Asn Glu Lys Glu Gly Phe Pro Ile Thr Ala Leu Arg Glu Ile Lys Ile  
                   100                                  105                                  110  
 Leu Gln Leu Leu Lys His Glu Asn Val Val Asn Leu Ile Glu Ile Cys  
                   115                                  120                                  125  
 Arg Thr Lys Ala Ser Pro Tyr Asn Arg Cys Lys Gly Ser Ile Tyr Leu  
   130                                  135                                  140  
 Val Phe Asp Phe Cys Glu His Asp Leu Ala Gly Leu Leu Ser Asn Val

145		150		155		160
Leu Val Lys Phe Thr Leu Ser Glu Ile Lys Arg Val Met Gln Met Leu						
		165		170		175
Leu Asn Gly Leu Tyr Tyr Ile His Arg Asn Lys Ile Leu His Arg Asp						
		180		185		190
Met Lys Ala Ala Asn Val Leu Ile Thr Arg Asp Gly Val Leu Lys Leu						
		195		200		205
Ala Asp Phe Gly Leu Ala Arg Ala Phe Ser Leu Ala Lys Asn Ser Gln						
		210		215		220
Pro Asn Arg Tyr Thr Asn Arg Val Val Thr Leu Trp Tyr Arg Pro Pro						
		225		230		235
Glu Leu Leu Leu Gly Glu Arg Asp Tyr Gly Pro Pro Ile Asp Leu Trp						
		245		250		255
Gly Ala Gly Cys Ile Met Ala Glu Met Trp Thr Arg Ser Pro Ile Met						
		260		265		270
Gln Gly Asn Thr Glu Gln His Gln Leu Ala Leu Ile Ser Gln Leu Cys						
		275		280		285
Gly Ser Ile Thr Pro Glu Val Trp Pro Asn Val Asp Asn Tyr Glu Leu						
		290		295		300
Tyr Glu Lys Leu Glu Leu Val Lys Gly Gln Lys Arg Lys Val Lys Asp						
		305		310		315
Arg Leu Lys Ala Met Cys Val Thr His Thr His Trp Thr Ser Ser Thr						
		325		330		335
Ser Cys Trp Cys Trp Thr Leu Pro Ser Ala Ser Thr Ala Met Thr Pro						
		340		345		350
Ser Thr Thr Thr Ser Ser Gly Pro Thr Pro Cys Pro Pro Thr Ser Arg						
		355		360		365
Ala Cys Ser Pro Pro Thr						
		370				

&lt;210&gt; 714

&lt;211&gt; 764

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<220>  
 <221> SITE  
 <222> (44)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (62)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (81)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (725)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 714  
 Asp Asp Val Gln Ser Ile Asn Trp Leu Arg Asp Gly Val Gln Leu Ala  
 1 5 10 15  
 Glu Ser Asn Arg Thr Arg Ile Thr Gly Glu Glu Val Glu Val Gln Asp  
 20 25 30  
 Ser Val Pro Ala Asp Ser Gly Leu Tyr Ala Cys Xaa Thr Ser Ser Pro  
 35 40 45  
 Ser Gly Ser Asp Thr Thr Tyr Phe Ser Val Asn Val Ser Xaa Ala Leu  
 50 55 60  
 Pro Ser Ser Glu Asp Asp Asp Asp Asp Asp Ser Ser Ser Glu Gly  
 65 70 75 80  
 Xaa Glu Thr Asp Asn Thr Lys Pro Asn Arg Met Pro Val Ala Pro Tyr  
 85 90 95  
 Trp Thr Ser Pro Glu Lys Met Glu Lys Lys Leu His Ala Val Pro Ala  
 100 105 110  
 Ala Lys Thr Val Lys Phe Lys Cys Pro Ser Ser Gly Xaa Pro Asn Pro  
 115 120 125  
 Thr Leu Arg Trp Leu Lys Asn Gly Lys Glu Phe Lys Pro Asp His Arg

130	135	140
Ile Gly Gly Tyr Lys Val Arg Tyr Ala Thr Trp Ser Ile Ile Met Asp		
145	150	155 160
Ser Val Val Pro Ser Asp Lys Gly Asn Tyr Thr Cys Ile Val Glu Asn		
	165	170 175
Glu Tyr Gly Ser Ile Asn His Thr Tyr Gln Leu Asp Val Val Glu Arg		
	180	185 190
Ser Pro His Arg Pro Ile Leu Gln Ala Gly Leu Pro Ala Asn Lys Thr		
	195	200 205
Val Ala Leu Gly Ser Asn Val Glu Phe Met Cys Lys Val Tyr Ser Asp		
	210	215 220
Pro Gln Pro His Ile Gln Trp Leu Lys His Ile Glu Val Asn Gly Ser		
	225	230 235 240
Lys Ile Gly Pro Asp Asn Leu Pro Tyr Val Gln Ile Leu Lys Thr Ala		
	245	250 255
Gly Val Asn Thr Thr Asp Lys Glu Met Glu Val Leu His Leu Arg Asn		
	260	265 270
Val Ser Phe Glu Asp Ala Gly Glu Tyr Thr Cys Leu Ala Gly Asn Ser		
	275	280 285
Ile Gly Leu Ser His His Ser Ala Trp Leu Thr Val Leu Glu Ala Leu		
	290	295 300
Glu Glu Arg Pro Ala Val Met Thr Ser Pro Leu Tyr Leu Glu Ile Ile		
	305	310 315 320
Ile Tyr Cys Thr Gly Ala Phe Leu Ile Ser Cys Met Val Gly Ser Val		
	325	330 335
Ile Val Tyr Lys Met Lys Ser Gly Thr Lys Lys Ser Asp Phe His Ser		
	340	345 350
Gln Met Ala Val His Lys Leu Ala Lys Ser Ile Pro Leu Arg Arg Gln		
	355	360 365
Val Thr Val Ser Ala Asp Ser Ser Ala Ser Met Asn Ser Gly Val Leu		
	370	375 380
Leu Val Arg Pro Ser Arg Leu Ser Ser Ser Gly Thr Pro Met Leu Ala		
	385	390 395 400
Gly Val Ser Glu Tyr Glu Leu Pro Glu Asp Pro Arg Trp Glu Leu Pro		

				405					410					415	
Arg	Asp	Arg	Leu	Val	Leu	Gly	Lys	Pro	Leu	Gly	Glu	Gly	Cys	Phe	Gly
			420					425					430		
Gln	Val	Val	Leu	Ala	Glu	Ala	Ile	Gly	Leu	Asp	Lys	Asp	Lys	Pro	Asn
			435				440					445			
Arg	Val	Thr	Lys	Val	Ala	Val	Lys	Met	Leu	Lys	Ser	Asp	Ala	Thr	Glu
			450				455					460			
Lys	Asp	Leu	Ser	Asp	Leu	Ile	Ser	Glu	Met	Glu	Met	Met	Lys	Met	Ile
465					470					475					480
Gly	Lys	His	Lys	Asn	Ile	Ile	Asn	Leu	Leu	Gly	Ala	Cys	Thr	Gln	Asp
				485				490						495	
Gly	Pro	Leu	Tyr	Val	Ile	Val	Glu	Tyr	Ala	Ser	Lys	Gly	Asn	Leu	Arg
			500					505					510		
Glu	Tyr	Leu	Gln	Ala	Arg	Arg	Pro	Pro	Gly	Leu	Glu	Tyr	Cys	Tyr	Asn
			515				520					525			
Pro	Ser	His	Asn	Pro	Glu	Glu	Gln	Leu	Ser	Ser	Lys	Asp	Leu	Val	Ser
							535					540			
Cys	Ala	Tyr	Gln	Val	Ala	Arg	Gly	Met	Glu	Tyr	Leu	Ala	Ser	Lys	Lys
545					550					555					560
Cys	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Val	Leu	Val	Thr	Glu	Asp
				565					570					575	
Asn	Val	Met	Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ala	Arg	Asp	Ile	His	His
			580					585					590		
Ile	Asp	Tyr	Tyr	Lys	Lys	Thr	Thr	Asn	Gly	Arg	Leu	Pro	Val	Lys	Trp
			595					600					605		
Met	Ala	Pro	Glu	Ala	Leu	Phe	Asp	Arg	Ile	Tyr	Thr	His	Gln	Ser	Asp
						615							620		
Val	Trp	Ser	Phe	Gly	Val	Leu	Leu	Trp	Glu	Ile	Phe	Thr	Leu	Gly	Gly
625					630					635					640
Ser	Pro	Tyr	Pro	Gly	Val	Pro	Val	Glu	Glu	Leu	Phe	Lys	Leu	Leu	Lys
				645					650					655	
Glu	Gly	His	Arg	Met	Asp	Lys	Pro	Ser	Asn	Cys	Thr	Asn	Glu	Leu	Tyr
			660					665					670		
Met	Met	Met	Arg	Asp	Cys	Trp	His	Ala	Val	Pro	Ser	Gln	Arg	Pro	Thr

740

675	680	685
Phe Lys Gln Leu Val Glu Asp Leu Asp Arg Ile Val Ala Leu Thr Ser		
690	695	700
Asn Gln Glu Tyr Leu Asp Leu Ser Met Pro Leu Asp Gln Tyr Ser Pro		
705	710	715
Ser Phe Pro Asp Xaa Arg Ser Ser Thr Cys Ser Ser Gly Glu Asp Ser		
725	730	735
Val Phe Ser His Glu Pro Leu Pro Glu Glu Pro Cys Leu Pro Arg His		
740	745	750
Pro Ala Gln Leu Ala Asn Gly Gly Leu Lys Arg Arg		
755	760	

&lt;210&gt; 715

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (139)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (145)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (149)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 715

Asp Pro Thr Gly Val Gln Gly Trp Arg Glu Asn Leu Cys Glu Glu Arg

1					5					10					15						
Glu	Gly	Ala	Ser	Arg	Glu	Phe	Lys	Gly	Arg	Cys	Glu	Xaa	Ile	Met	Asp						
			20							25				30							
Ala	Met	Lys	Arg	Gly	Leu	Cys	Cys	Val	Leu	Leu	Leu	Cys	Gly	Ala	Val						
			35							40				45							
Phe	Val	Ser	Pro	Ser	Gln	Glu	Ile	His	Ala	Arg	Phe	Arg	Arg	Gly	Ala						
			50							55				60							
Arg	Ser	Tyr	Gln	Val	Ile	Cys	Arg	Asp	Glu	Lys	Thr	Gln	Met	Ile	Tyr						
65									70					75							
Gln	Gln	His	Gln	Ser	Trp	Leu	Arg	Pro	Val	Leu	Arg	Ser	Asn	Arg	Val						
												85					90				
Glu	Tyr	Cys	Trp	Cys	Asn	Ser	Gly	Arg	Ala	Gln	Cys	His	Ser	Val	Pro						
Val	Lys	Ser	Cys	Ser	Glu	Pro	Arg	Cys	Phe	Asn	Gly	Gly	Thr	Cys	Gln						
Gln	Ala	Cys	Thr	Ser	Gln	Ile	Ser	Cys	Ala	Xaa	Ala	Pro	Lys	Ile	Ser						
Xaa	Asn	Xaa	Val	Xaa	Asn	Thr	Arg	Pro	Cys	Tyr	Glu	Thr	Arg	Ala	Gln						
145																					

Arg	Ser	Gly	Pro	Arg	Thr	Pro	Ala	Cys	Pro	Gly	Leu	Ala	Ser	Cys	Thr
1				5					10					15	
Cys	Cys	Pro	Leu	Thr	Pro	Gly	Lys	Met	Ala	Gly	Pro	Trp	Thr	Phe	Thr
			20					25					30		
Leu	Leu	Cys	Gly	Leu	Leu	Ala	Ala	Thr	Leu	Ile	Gln	Ala	Thr	Leu	Ser
		35					40					45			
Pro	Thr	Ala	Val	Leu	Ile	Leu	Gly	Pro	Lys	Val	Ile	Lys	Glu	Lys	Leu
	50					55					60				

742

Thr Gln Glu Leu Lys Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu  
 65 70 75 80  
 Pro Leu Leu Ser Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val  
 85 90 95  
 Leu Gly Ser Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys  
 100 105 110  
 Val Ile Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn  
 115 120 125  
 Asp Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe  
 130 135 140  
 Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr Glu  
 145 150 155 160  
 Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro Thr Arg  
 165 170 175  
 Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu Arg Ile Gln  
 180 185 190  
 Leu Leu His Lys Leu Ser Phe Leu Val Asn Ala Leu Ala Lys Gln Val  
 195 200 205  
 Met Asn Leu Leu Val Pro Ser Met Pro Arg Trp Pro Asn  
 210 215 220

&lt;210&gt; 717

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 717

Thr His Pro Asn Gln Ser Gln Ile Gln Thr Pro Ser Ser Leu Ile Pro  
 1 5 10 15  
 Pro Gly Met Thr Leu Ile Ser Gln Met Phe Leu His Gly Glu Arg Asn  
 20 25 30  
 Asn Gly Gly Phe Asp Leu Ser Asp Ala Leu Pro Asp Asn Glu Asn Lys  
 35 40 45  
 Lys Pro Thr Ala Ile Pro Lys Lys Pro Ser Ala Gly Asp Asp Phe Asp  
 50 55 60



743

Leu Gly Asp Ala Val Val Asp Gly Glu Asn Asp Asp Pro Arg Pro Pro  
 65 70 75 80  
 Asn Pro Pro Lys Pro Met Pro Asn Pro Asn Pro Asn His Pro Ser Ser  
 85 90 95  
 Ser Gly Ser Phe Ser Asp Ala Asp Leu Ala Asp Gly Val Ser Gly Gly  
 100 105 110  
 Glu Gly Lys Gly Gly Ser Asp Gly Gly Gly Ser His Arg Lys Glu Gly  
 115 120 125  
 Glu Glu Ala Asp Ala Pro Gly Val Ile Pro Gly Ile Val Gly Ala Val  
 130 135 140  
 Val Val Ala Val Ala Gly Ala Ile Ser Ser Phe Ile Ala Tyr Gln Lys  
 145 150 155 160  
 Lys Lys Leu Cys Phe Lys Glu Asn Ala Glu Gln Gly Glu Val Asp Met  
 165 170 175  
 Glu Ser His Arg Asn Ala Asn Ala Glu Pro Ala Val Gln Arg Thr Leu  
 180 185 190  
 Leu Glu Lys  
 195

<210> 718  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<400> 718  
 Ser Asp Arg Pro Thr Met Ala Pro Gly Val Ala Arg Gly Pro Thr Pro  
 1 5 10 15  
 Tyr Trp Arg Leu Arg Leu Gly Gly Ala Ala Leu Leu Leu Leu Leu Ile  
 20 25 30  
 Pro Val Ala Ala Ala Gln Glu Pro Pro Gly Ala Ala Cys Ser Gln Asn  
 35 40 45  
 Thr Asn Lys Thr Cys Glu Glu Cys Leu Lys Asn Val Ser Cys Leu Trp  
 50 55 60  
 Cys Asn Thr Asn Lys Ala Cys Leu Asp Tyr Pro Val Thr Ser Val Leu  
 65 70 75 80  
 Pro Pro Ala Ser Leu Cys Lys Leu Ser Ser Ala Arg Trp Gly Val Cys

85								90				95			
Trp	Val	Asn	Phe	Glu	Ala	Leu	Ile	Ile	Thr	Met	Ser	Val	Val	Gly	Gly
100				105				110							
Thr	Leu	Leu	Leu	Gly	Ile	Ala	Ile	Cys	Cys	Cys	Cys	Cys	Cys	Arg	Arg
115				120				125							
Lys	Arg	Ser	Arg	Lys	Pro	Asp	Arg	Ser	Glu	Glu	Lys	Ala	Met	Arg	Glu
130				135				140							
Arg	Glu	Glu	Arg	Arg	Ile	Arg	Gln	Glu	Glu	Arg	Arg	Ala	Glu	Met	Lys
145				150				155				160			
Thr	Arg	His	Asp	Glu	Ile	Arg	Lys	Lys	Tyr	Gly	Leu	Phe	Lys	Glu	Glu
165				170				175							
Asn	Pro	Tyr	Ala	Arg	Phe	Glu	Asn	Asn							
180				185											

```
<210> 719
<211> 567
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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<400> 719
Phe Arg Glu Leu Lys Asn Thr Val Ser Tyr Ser Gly Lys Arg Lys Gly
  1                      5                      10                      15
Pro Asp Ser Leu Ser Asp Gly Pro Ala Cys Lys Arg Pro Ala Leu Leu
          20                      25                      30
His Ser Gln Phe Leu Thr Pro Pro Gln Thr Pro Thr Pro Gly Glu Ser
          35                      40                      45
Met Glu Asp Val His Leu Asn Glu Xaa Lys Gln Glu Ser Ser Ala Asp
          50                      55                      60
Leu Leu Gln Asn Ile Ile Asn Ile Lys Asn Glu Cys Ser Pro Val Ser

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745

65		70		75		80
Leu Asn Thr Val Xaa Val Ser Trp Leu Asn Pro Val Val Val Pro Gln						
	85			90		95
Ser Ser Pro Ala Glu Gln Cys Gln Asp Phe His Gly Gly Gln Val Phe						
	100			105		110
Ser Pro Pro Gln Lys Cys Gln Pro Phe Gln Val Arg Gly Ser Gln Gln						
	115			120		125
Met Ile Asp Gln Ala Ser Leu Tyr Gln Tyr Ser Pro Gln Asn Gln His						
	130			135		140
Val Glu Gln Gln Pro His Tyr Thr His Lys Pro Thr Leu Glu Tyr Ser						
	145			150		155
Pro Phe Pro Ile Pro Pro Gln Ser Pro Ala Tyr Glu Pro Asn Leu Phe						
	165			170		175
Asp Gly Pro Glu Ser Gln Phe Cys Pro Asn Gln Ser Leu Val Ser Leu						
	180			185		190
Leu Gly Asp Gln Arg Glu Ser Glu Asn Ile Ala Asn Pro Met Gln Thr						
	195			200		205
Ser Ser Ser Val Gln Gln Gln Asn Asp Ala His Leu His Ser Phe Ser						
	210			215		220
Met Met Pro Ser Ser Ala Cys Glu Ala Met Val Gly His Glu Met Ala						
	225			230		235
Ser Asp Ser Ser Asn Thr Ser Leu Pro Phe Ser Asn Met Gly Asn Pro						
	245			250		255
Met Asn Thr Thr Gln Leu Gly Lys Ser Leu Phe Gln Trp Gln Val Glu						
	260			265		270
Gln Glu Glu Ser Lys Leu Ala Asn Ile Ser Gln Asp Gln Phe Leu Ser						
	275			280		285
Lys Asp Ala Asp Gly Asp Thr Phe Leu His Ile Ala Val Ala Gln Gly						
	290			295		300
Arg Arg Ala Leu Ser Tyr Val Leu Ala Arg Lys Met Asn Ala Leu His						
	305			310		315
Met Leu Asp Ile Lys Glu His Asn Gly Gln Ser Ala Phe Gln Val Ala						
	325			330		335
Val Ala Ala Asn Gln His Leu Ile Val Gln Asp Leu Val Asn Ile Gly						

746

340	345	350
Ala Gln Val Asn Thr Thr Asp Cys Trp Gly Arg Thr Pro Leu His Val		
355	360	365
Cys Ala Glu Lys Gly His Ser Gln Val Leu Gln Ala Ile Gln Lys Gly		
370	375	380
Ala Val Gly Ser Asn Gln Phe Val Asp Leu Glu Ala Thr Asn Tyr Asp		
385	390	395
Gly Leu Thr Pro Leu His Cys Ala Val Ile Ala His Asn Ala Val Val		
405	410	415
His Glu Leu Gln Arg Asn Gln Gln Pro His Ser Pro Glu Val Gln Glu		
420	425	430
Leu Leu Leu Lys Asn Lys Ser Leu Val Asp Thr Ile Lys Cys Leu Ile		
435	440	445
Gln Met Gly Ala Ala Val Glu Ala Lys Asp Arg Lys Ser Gly Arg Thr		
450	455	460
Ala Leu His Leu Ala Ala Glu Glu Ala Asn Leu Glu Leu Ile Arg Leu		
465	470	475
Phe Leu Glu Leu Pro Ser Cys Leu Ser Phe Val Asn Ala Lys Ala Tyr		
485	490	495
Asn Gly Asn Thr Ala Leu His Val Ala Ala Ser Leu Gln Tyr Arg Leu		
500	505	510
Thr Gln Leu Asp Ala Val Arg Leu Leu Met Arg Lys Gly Ala Asp Pro		
515	520	525
Ser Thr Arg Asn Leu Glu Asn Glu Gln Pro Val His Leu Val Pro Asp		
530	535	540
Gly Pro Val Gly Glu Gln Ile Arg Arg Ile Leu Lys Gly Lys Ser Ile		
545	550	555
Gln Gln Arg Ala Pro Pro Tyr		
565		

&lt;210&gt; 720

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

747

&lt;400&gt; 720

```

Asp Pro Arg Val Arg Ser His Ser Arg Pro Thr Pro Leu Met Ala Asn
 1           5           10           15

Arg Tyr Thr Met Asp Leu Thr Ala Ile Tyr Glu Ser Leu Leu Ser Leu
      20           25           30

Ser Pro Asp Val Pro Val Pro Ser Asp His Gly Gly Thr Glu Ser Ser
      35           40           45

Pro Gly Trp Gly Ser Ser Gly Pro Trp Ser Leu Ser Pro Ser Asp Ser
      50           55           60

Ser Pro Ser Gly Val Thr Ser Arg Leu Pro Gly Arg Ser Thr Ser Leu
      65           70           75           80

Val Glu Gly Arg Ser Cys Gly Trp Val Pro Pro Pro Pro Gly Phe Ala
      85           90           95

Pro Leu Ala Pro Arg Leu Gly Pro Glu Leu Ser Pro Ser Pro Thr Ser
      100           105           110

Pro Thr Ala Thr Ser Thr Thr Pro Ser Arg Tyr Lys Thr Glu Leu Cys
      115           120           125

Arg Thr Phe Ser Glu Ser Gly Arg Cys Arg Tyr Gly Ala Lys Cys Gln
      130           135           140

Phe Ala His Gly Leu Gly Glu Leu Arg Gln Ala Asn Arg His Pro Lys
      145           150           155           160

Tyr Lys Thr Glu Leu Cys His Lys Phe Tyr Leu Gln Gly Arg Cys Pro
      165           170           175

Thr Ala Leu Ala Ala Thr Ser Ser Thr Thr Leu Ala Lys Thr Trp Arg
      180           185           190

Pro Arg Ala Thr Leu Leu Cys Phe Ala Arg Ala Ser Ala Ser Pro Ala
      195           200           205

Cys Pro Leu Ala Ala Gly Pro His His His His Gln Ala Trp Pro Ala
      210           215           220

Leu Pro Cys Pro Pro Ala Pro Ser Arg Pro Pro Ala Pro His His His
      225           230           235           240

Leu Gly Thr Phe His Cys His Pro Leu Pro Ser Leu Leu Pro Leu Ala
      245           250           255

Pro Pro Trp Leu Glu Glu Thr Pro Pro Gln Ser Val Ala Pro Pro Ala
      260           265           270

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Glu Gly His Ser Tyr Gln Arg Leu Gly Ala Leu Gly Trp Pro Gly Ser  
 275 280 285

Asp Pro Leu Cys Thr Val Pro Gly Ile Arg Pro  
 290 295

<210> 721

<211> 305

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (299)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 721

Arg Ser Gln Leu Leu Ala Leu Ala Cys Leu Pro Ala Pro Leu Leu Ala  
 1 5 10 15

Arg Ala Phe Ala Arg Pro Leu Leu Glu Asp Arg Gly Asp Ser Asp His  
 20 25 30

Ser Leu Trp Leu Gly Arg Glu Thr Glu Ala Ala Ala Ala Gln Gly Lys  
 35 40 45

Arg Gly Cys Ser Gly Gly Ser Arg Lys Met Ser Gly Glu Asp Glu Gln  
 50 55 60

Gln Glu Gln Thr Ile Ala Glu Asp Leu Val Val Thr Lys Tyr Lys Met  
 65 70 75 80

Gly Gly Asp Ile Ala Asn Arg Val Leu Arg Ser Leu Val Glu Ala Ser  
 85 90 95

Ser Ser Gly Val Ser Val Leu Ser Leu Cys Glu Lys Gly Asp Ala Met  
 100 105 110

Ile Met Glu Glu Thr Gly Lys Ile Phe Lys Lys Glu Lys Glu Met Lys  
 115 120 125

Lys Gly Ile Ala Phe Pro Thr Ser Ile Ser Val Asn Asn Cys Val Cys  
 130 135 140

His Phe Ser Pro Leu Lys Ser Asp Gln Asp Tyr Ile Leu Lys Glu Gly  
 145 150 155 160

Asp Leu Val Lys Ile Asp Leu Gly Val His Val Asp Gly Phe Ile Ala

749

	165		170		175
Asn Val Ala His Thr Phe Val Val Asp Val Ala Gln Gly Thr Gln Val					
	180		185		190
Thr Gly Arg Lys Ala Asp Val Ile Lys Ala Ala His Leu Cys Ala Glu					
	195		200		205
Ala Ala Leu Arg Leu Val Lys Pro Gly Asn Gln Asn Thr Gln Val Thr					
	210		215		220
Glu Ala Trp Asn Lys Val Ala His Ser Phe Asn Cys Thr Pro Ile Glu					
	225		230		235
Gly Met Leu Ser His Gln Leu Lys Gln His Val Ile Asp Gly Glu Lys					
		245		250	255
Thr Ile Ile Gln Asn Pro Thr Asp Gln Gln Lys Lys Asp His Glu Lys					
	260		265		270
Ala Glu Phe Glu Val His Glu Val Tyr Ala Val Asp Val Leu Val Ser					
	275		280		285
Ser Gly Glu Gly Lys Val Arg Arg Val Pro Xaa Leu Ala Lys Arg Gly					
	290		295		300
Asp					
305					

&lt;210&gt; 722

&lt;211&gt; 394

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 722

Ala His Ala Ser Ala Ala Thr Thr Ser Ala Ala Asp Arg Gly Glu Met															
1				5				10					15		
Ala Ala Thr Glu Gly Val Gly Glu Ala Ala Gln Gly Gly Glu Pro Gly															
	20						25						30		
Gln Pro Ala Gln Pro Pro Pro Gln Pro His Pro Pro Pro Pro Gln Gln															
	35						40					45			
Gln His Lys Glu Glu Met Ala Ala Glu Ala Gly Glu Ala Val Ala Ser															
	50					55				60					
Pro Met Asp Asp Gly Phe Val Ser Leu Asp Ser Pro Ser Tyr Val Leu															
	65				70				75						80

750

Tyr	Arg	Asp	Arg	Ala	Glu	Trp	Ala	Asp	Ile	Asp	Pro	Val	Pro	Gln	Asn		
				85					90					95			
Asp	Gly	Pro	Asn	Pro	Val	Val	Gln	Ile	Ile	Tyr	Ser	Asp	Lys	Phe	Arg		
			100					105					110				
Asp	Val	Tyr	Asp	Tyr	Phe	Arg	Ala	Val	Leu	Gln	Arg	Asp	Glu	Arg	Ser		
		115					120					125					
Glu	Arg	Ala	Phe	Lys	Leu	Thr	Arg	Asp	Ala	Ile	Glu	Leu	Asn	Ala	Ala		
	130					135					140						
Asn	Tyr	Thr	Val	Trp	His	Phe	Arg	Arg	Val	Leu	Leu	Lys	Ser	Leu	Gln		
145					150					155					160		
Lys	Asp	Leu	His	Glu	Glu	Met	Asn	Tyr	Ile	Thr	Ala	Ile	Ile	Glu	Glu		
			165						170					175			
Gln	Pro	Lys	Asn	Tyr	Gln	Val	Trp	His	His	Arg	Arg	Val	Leu	Val	Glu		
			180					185					190				
Trp	Leu	Arg	Asp	Pro	Ser	Gln	Glu	Leu	Glu	Phe	Ile	Ala	Asp	Ile	Leu		
		195					200					205					
Asn	Gln	Asp	Ala	Lys	Asn	Tyr	His	Ala	Trp	Gln	His	Arg	Gln	Trp	Val		
	210					215					220						
Ile	Gln	Glu	Phe	Lys	Leu	Trp	Asp	Asn	Glu	Leu	Gln	Tyr	Val	Asp	Gln		
225					230				235					240			
Leu	Leu	Lys	Glu	Asp	Val	Arg	Asn	Asn	Ser	Val	Trp	Asn	Gln	Arg	Tyr		
			245						250					255			
Phe	Val	Ile	Ser	Asn	Thr	Thr	Gly	Tyr	Asn	Asp	Arg	Ala	Val	Leu	Glu		
		260					265					270					
Arg	Glu	Val	Gln	Tyr	Thr	Leu	Glu	Met	Ile	Lys	Leu	Val	Pro	His	Asn		
		275					280					285					
Glu	Ser	Ala	Trp	Asn	Tyr	Leu	Lys	Gly	Ile	Leu	Gln	Asp	Arg	Gly	Leu		
	290					295					300						
Ser	Lys	Tyr	Pro	Asn	Leu	Leu	Asn	Gln	Leu	Leu	Asp	Leu	Gln	Pro	Ser		
305					310					315					320		
His	Ser	Ser	Pro	Tyr	Leu	Ile	Ala	Phe	Leu	Val	Asp	Ile	Tyr	Glu	Asp		
			325					330						335			
Met	Leu	Glu	Asn	Gln	Cys	Asp	Asn	Lys	Glu	Asp	Ile	Leu	Asn	Lys	Ala		
			340					345					350				



751

Leu Glu Leu Cys Glu Ile Leu Ala Lys Glu Lys Asp Thr Ile Arg Lys  
 355 360 365

Glu Tyr Trp Arg Tyr Ile Gly Arg Ser Leu Gln Ser Lys His Ser Thr  
 370 375 380

Glu Asn Asp Ser Pro Thr Asn Val Gln Gln  
 385 390

<210> 723

<211> 337

<212> PRT

<213> Homo sapiens

<400> 723

Lys Thr Pro Lys Lys Ser Arg Val Arg Phe Ser Asn Ile Met Glu Ile  
 1 5 10 15

Arg Gln Leu Pro Ser Ser His Ala Leu Glu Ala Lys Leu Ser Arg Met  
 20 25 30

Ser Tyr Pro Val Lys Glu Gln Glu Ser Ile Leu Lys Thr Val Gly Lys  
 35 40 45

Leu Thr Ala Thr Gln Val Ala Lys Ile Ser Phe Phe Phe Cys Phe Val  
 50 55 60

Trp Phe Leu Ala Asn Leu Ser Tyr Gln Glu Ala Leu Ser Asp Thr Gln  
 65 70 75 80

Val Ala Ile Val Asn Ile Leu Ser Ser Thr Ser Gly Leu Phe Thr Leu  
 85 90 95

Ile Leu Ala Ala Val Phe Pro Ser Asn Ser Gly Asp Arg Phe Thr Leu  
 100 105 110

Ser Lys Leu Leu Ala Val Ile Leu Ser Ile Gly Gly Val Val Leu Val  
 115 120 125

Asn Leu Ala Gly Ser Glu Lys Pro Ala Gly Arg Asp Thr Val Gly Ser  
 130 135 140

Ile Trp Ser Leu Ala Gly Ala Met Leu Tyr Ala Val Tyr Ile Val Met  
 145 150 155 160

Ile Lys Arg Lys Val Asp Arg Glu Asp Lys Leu Asp Ile Pro Met Phe  
 165 170 175

752

Phe Gly Phe Val Gly Leu Phe Asn Leu Leu Leu Leu Trp Pro Gly Phe  
                   180                                  185                                  190  
 Phe Leu Leu His Tyr Thr Gly Phe Glu Asp Phe Glu Phe Pro Asn Lys  
                   195                                  200                                  205  
 Val Val Leu Met Cys Ile Ile Ile Asn Gly Leu Ile Gly Thr Val Leu  
                   210                                  215                                  220  
 Ser Glu Phe Leu Trp Leu Trp Gly Cys Phe Leu Thr Ser Ser Leu Ile  
                   225                                  230                                  235                                  240  
 Gly Thr Leu Ala Leu Ser Leu Thr Ile Pro Leu Ser Ile Ile Ala Asp  
                                   245                                  250                                  255  
 Met Cys Met Gln Lys Val Gln Phe Ser Trp Leu Phe Phe Ala Gly Ala  
                                   260                                  265                                  270  
 Ile Pro Val Phe Phe Ser Phe Phe Ile Val Thr Leu Leu Cys His Tyr  
                   275                                  280                                  285  
 Asn Asn Trp Asp Pro Val Met Val Gly Ile Arg Arg Ile Phe Ala Phe  
                   290                                  295                                  300  
 Ile Cys Arg Lys His Arg Ile Gln Arg Val Pro Glu Asp Ser Glu Gln  
                   305                                  310                                  315                                  320  
 Cys Glu Ser Leu Ile Ser Met His Ser Val Ser Gln Glu Asp Gly Ala  
                                   325                                  330                                  335

Ser

&lt;210&gt; 724

&lt;211&gt; 665

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (216)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (298)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 724

753

Ala Pro Leu Asp Gly Gly Ala Ala Ala Ala Ser Val Ala Ser Ser Ile  
 1 5 10 15  
 Arg Gln Glu Ala Ser Ala Met Gln Ala Pro Arg Glu Leu Ala Val Gly  
 20 25 30  
 Ile Asp Leu Gly Thr Thr Tyr Ser Cys Val Gly Val Phe Gln Gln Gly  
 35 40 45  
 Arg Val Glu Ile Leu Ala Asn Asp Gln Gly Asn Arg Thr Thr Pro Ser  
 50 55 60  
 Tyr Val Ala Phe Thr Asp Thr Glu Arg Leu Val Gly Asp Ala Ala Lys  
 65 70 75 80  
 Ser Gln Ala Ala Leu Asn Pro His Asn Thr Val Phe Asp Ala Lys Arg  
 85 90 95  
 Leu Ile Gly Arg Lys Phe Ala Asp Thr Thr Val Gln Ser Asp Met Lys  
 100 105 110  
 His Trp Pro Phe Arg Val Val Ser Glu Gly Gly Lys Pro Lys Val Arg  
 115 120 125  
 Val Cys Tyr Arg Gly Glu Asp Lys Thr Phe Tyr Pro Glu Glu Ile Ser  
 130 135 140  
 Ser Met Val Leu Ser Lys Met Lys Glu Thr Ala Glu Ala Tyr Leu Gly  
 145 150 155 160  
 Gln Pro Val Lys His Ala Val Ile Thr Val Pro Ala Tyr Phe Asn Asp  
 165 170 175  
 Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly Ala Ile Ala Gly Leu Asn  
 180 185 190  
 Val Leu Arg Ile Ile Asn Glu Pro Thr Ala Ala Ala Ile Ala Tyr Gly  
 195 200 205  
 Leu Asp Arg Arg Gly Ala Gly Xaa Arg Asn Val Leu Ile Phe Asp Leu  
 210 215 220  
 Gly Gly Gly Thr Phe Asp Val Ser Val Leu Ser Ile Asp Ala Gly Val  
 225 230 235 240  
 Phe Glu Val Lys Ala Thr Ala Gly Asp Thr His Leu Gly Gly Glu Asp  
 245 250 255  
 Phe Asp Asn Arg Leu Val Asn His Phe Met Glu Glu Phe Arg Arg Lys  
 260 265 270

754

His Gly Lys Asp Leu Ser Gly Asn Lys Arg Ala Leu Arg Arg Leu Arg  
 275 280 285

Thr Ala Cys Glu Arg Ala Lys Arg Thr Xaa Ser Ser Ser Thr Gln Ala  
 290 295 300

Thr Leu Glu Ile Asp Ser Leu Phe Glu Gly Val Asp Phe Tyr Thr Ser  
 305 310 315 320

Ile Thr Arg Ala Arg Phe Glu Glu Leu Cys Ser Asp Leu Phe Arg Ser  
 325 330 335

Thr Leu Glu Pro Val Glu Lys Ala Leu Arg Asp Ala Lys Leu Asp Lys  
 340 345 350

Ala Gln Ile His Asp Val Val Leu Val Gly Gly Ser Thr Arg Ile Pro  
 355 360 365

Lys Val Gln Lys Leu Leu Gln Asp Phe Phe Asn Gly Lys Glu Leu Asn  
 370 375 380

Lys Ser Ile Asn Pro Asp Glu Ala Val Ala Tyr Gly Ala Ala Val Gln  
 385 390 395 400

Ala Ala Val Leu Met Gly Asp Lys Cys Glu Lys Val Gln Asp Leu Leu  
 405 410 415

Leu Leu Asp Val Ala Pro Leu Ser Leu Gly Leu Glu Thr Ala Gly Gly  
 420 425 430

Val Met Thr Thr Leu Ile Gln Arg Asn Ala Thr Ile Pro Thr Lys Gln  
 435 440 445

Thr Gln Thr Phe Thr Thr Tyr Ser Asp Asn Gln Pro Gly Val Phe Ile  
 450 455 460

Gln Val Tyr Glu Gly Glu Arg Ala Met Thr Lys Asp Asn Asn Leu Leu  
 465 470 475 480

Gly Arg Phe Glu Leu Ser Gly Ile Pro Pro Ala Pro Arg Gly Val Pro  
 485 490 495

Gln Ile Glu Val Thr Phe Asp Ile Asp Ala Asn Gly Ile Leu Ser Val  
 500 505 510

Thr Ala Thr Asp Arg Ser Thr Gly Lys Ala Asn Lys Ile Thr Ile Thr  
 515 520 525

Asn Asp Lys Gly Arg Leu Ser Lys Glu Glu Val Glu Arg Met Val His  
 530 535 540

755

Glu Ala Glu Gln Tyr Lys Ala Glu Asp Glu Ala Gln Arg Asp Arg Val  
 545 550 555 560  
 Ala Ala Lys Asn Ser Leu Glu Ala His Val Phe His Val Lys Gly Ser  
 565 570 575  
 Leu Gln Glu Glu Ser Leu Arg Asp Lys Ile Pro Glu Glu Asp Arg Arg  
 580 585 590  
 Lys Met Gln Asp Lys Cys Arg Glu Val Leu Ala Trp Leu Glu His Asn  
 595 600 605  
 Gln Leu Ala Glu Lys Glu Glu Tyr Glu His Gln Lys Arg Glu Leu Glu  
 610 615 620  
 Gln Ile Cys Arg Pro Ile Phe Ser Arg Leu Tyr Gly Gly Pro Gly Val  
 625 630 635 640  
 Pro Gly Gly Ser Ser Cys Gly Thr Gln Ala Arg Gln Gly Asp Pro Ser  
 645 650 655  
 Thr Gly Pro Ile Ile Glu Glu Val Asp  
 660 665

&lt;210&gt; 725

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 725

Ala Arg Phe Ile Lys Leu Ile Phe Phe Ile Leu Val Val Lys Ser Ser  
 1 5 10 15  
 Leu Ile Ala Phe Cys Gln Leu Asp Phe Xaa Val Cys Val Ile Phe Lys  
 20 25 30  
 Gly Arg Met Thr Gly Gln Ile Ser Asn Lys Lys Cys Ile Glu Leu Glu  
 35 40 45  
 Asn Ile Val Val Pro Ser Tyr Pro Trp Asp Ile Arg Ser Lys Thr Pro  
 50 55 60  
 Ser Glu Arg Leu Lys Pro Trp Ile Val  
 65 70

756

&lt;210&gt; 726

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 726

Thr Ala Ser Trp Ser Pro Ala Pro Val Pro Ser Ser Leu Glu Arg Leu  
 1 5 10 15

Phe Ser Pro Asp Gly Thr Phe Pro Ser Arg Arg Phe Leu Gly Leu Trp  
 20 25 30

Leu Phe Phe Ser Cys Ala Arg Leu Ile Gly His Leu Leu Ala Ser Ile  
 35 40 45

Ser Val Val Leu Leu Pro His Phe Leu Phe Cys Cys Phe Ser Val Leu  
 50 55 60

Ser Lys Tyr Leu Leu Cys Ser Trp Leu Pro Phe Arg Arg Gln Val Phe  
 65 70 75 80

Ser Phe Pro Leu Ala Leu Leu Leu Ile Trp Leu Leu Pro Thr Lys Ala  
 85 90 95

Cys Ser Val Arg Ile Ser Trp Phe Ser Thr Cys Gln Asn Leu Leu Gln  
 100 105 110

Pro Gln Phe Leu Gly Leu Asn Leu Tyr Val  
 115 120

&lt;210&gt; 727

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 727

Gly Thr Thr Thr Arg Asp Phe Thr Gln Leu Asn Glu Leu Gln Cys Arg  
 1 5 10 15

Phe Pro Arg Arg Leu Val Val Leu Gly Phe Pro Cys Asn Gln Phe Gly  
 20 25 30

His Gln Glu Asn Cys Gln Asn Glu Glu Ile Leu Asn Ser Leu Lys Tyr  
 35 40 45

Val Arg Pro Gly Gly Gly Tyr Gln Pro Thr Phe Thr Leu Val Gln Lys

757

50                      55                      60  
 Cys Glu Val Asn Gly Gln Asn Glu His Pro Val Phe Ala Tyr Leu Lys  
 65                      70                      75                      80  
 Asp Lys Leu Pro Tyr Pro Tyr Asp Asp Pro Phe Ser Leu Met Thr Asp  
                     85                      90                      95  
 Pro Lys Leu Ile Ile Trp Ser Pro Val Arg Arg Ser Asp Val Ala Trp  
                     100                      105                      110  
 Asn Phe Glu Lys Phe Leu Ile Gly Pro Glu Gly Glu Pro Phe Arg Arg  
                     115                      120                      125  
 Tyr Ser Arg Thr Phe Pro Thr Ile Asn Ile Glu Pro Asp Ile Lys Arg  
                     130                      135                      140  
 Leu Leu Lys Val Ala Ile  
 145                      150

&lt;210&gt; 728

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 728

Arg Ala Gly His Pro Leu His Pro Arg Glu Ala Pro Pro Ala Ala Arg  
 1                      5                      10                      15  
 Ser His Thr Pro Lys Pro Leu Leu Met Val His Gly Trp Pro Gly Ser  
                     20                      25                      30  
 Phe Tyr Glu Phe Tyr Lys Ile Ile Pro Leu Leu Thr Asp Pro Lys Asn  
                     35                      40                      45  
 His Gly Leu Ser Asp Glu His Val Phe Glu Val Ile Cys Pro Ser Ile  
                     50                      55                      60  
 Pro Gly Tyr Gly Phe Ser Glu Ala Ser Ser Lys Lys Gly Phe Asn Ser  
 65                      70                      75                      80  
 Val Ala Thr Ala Arg Ile Phe Tyr Lys Leu Met Leu Arg Leu Gly Phe  
                     85                      90                      95  
 Gln Glu Phe Tyr Ile Gln Gly Gly Asp Trp Gly Ser Leu Ile Cys Thr  
                     100                      105                      110  
 Asn Met Ala Gln Leu Val Pro Ser His Val Lys Gly Leu His Leu Asn  
                     115                      120                      125

758

Met Ala Leu Val Leu Ser Asn Phe Ser Thr Leu Thr Leu Leu Leu Gly  
 130 135 140

Gln Arg Phe Gly Arg Phe Leu Gly Leu Thr Glu Arg Asp Val Glu Leu  
 145 150 155 160

Leu Tyr Pro Val Lys Glu Lys Val Phe Tyr Ser Leu Met Arg Glu Ser  
 165 170 175

Gly Tyr Met His Ile Gln Cys Thr Lys Pro Asp Thr Val Ala Leu Leu  
 180 185 190

<210> 729  
 <211> 466  
 <212> PRT  
 <213> Homo sapiens

<400> 729  
 Glu His Gln Glu Ile Met Asn Asn Phe Gly Asn Glu Glu Phe Asp Cys  
 1 5 10 15

His Phe Leu Asp Glu Gly Phe Thr Ala Lys Asp Ile Leu Asp Gln Lys  
 20 25 30

Ile Asn Glu Val Ser Ser Ser Asp Asp Lys Asp Ala Phe Tyr Val Ala  
 35 40 45

Asp Leu Gly Asp Ile Leu Lys Lys His Leu Arg Trp Leu Lys Ala Leu  
 50 55 60

Pro Arg Val Thr Pro Phe Tyr Ala Val Lys Cys Asn Asp Ser Lys Ala  
 65 70 75 80

Ile Val Lys Thr Leu Ala Ala Thr Gly Thr Gly Phe Asp Cys Ala Ser  
 85 90 95

Lys Thr Glu Ile Gln Leu Val Gln Ser Leu Gly Val Pro Pro Glu Arg  
 100 105 110

Ile Ile Tyr Ala Asn Pro Cys Lys Gln Val Ser Gln Ile Lys Tyr Ala  
 115 120 125

Ala Asn Asn Gly Val Gln Met Met Thr Phe Asp Ser Glu Val Glu Leu  
 130 135 140



759

Met	Lys	Val	Ala	Arg	Ala	His	Pro	Lys	Ala	Lys	Leu	Val	Leu	Arg	Ile	145	150	155	160
Ala	Thr	Asp	Asp	Ser	Lys	Ala	Val	Cys	Arg	Leu	Ser	Val	Lys	Phe	Gly	165	170	175	
Ala	Thr	Leu	Arg	Thr	Ser	Arg	Leu	Leu	Leu	Glu	Arg	Ala	Lys	Glu	Leu	180	185	190	
Asn	Ile	Asp	Val	Val	Gly	Val	Ser	Phe	His	Val	Gly	Ser	Gly	Cys	Thr	195	200	205	
Asp	Pro	Glu	Thr	Phe	Val	Gln	Ala	Ile	Ser	Asp	Ala	Arg	Cys	Val	Phe	210	215	220	
Asp	Met	Gly	Ala	Glu	Val	Gly	Phe	Ser	Met	Tyr	Leu	Leu	Asp	Ile	Gly	225	230	235	240
Gly	Gly	Phe	Pro	Gly	Ser	Glu	Asp	Val	Lys	Leu	Lys	Phe	Glu	Glu	Ile	245	250	255	
Thr	Gly	Val	Ile	Asn	Pro	Ala	Leu	Asp	Lys	Tyr	Phe	Pro	Ser	Asp	Ser	260	265	270	
Gly	Val	Arg	Ile	Ile	Ala	Glu	Pro	Gly	Arg	Tyr	Tyr	Val	Ala	Ser	Ala	275	280	285	
Phe	Thr	Leu	Ala	Val	Asn	Ile	Ile	Ala	Lys	Lys	Ile	Val	Leu	Lys	Glu	290	295	300	
Gln	Thr	Gly	Ser	Asp	Asp	Glu	Asp	Glu	Ser	Ser	Glu	Gln	Thr	Phe	Met	305	310	315	320
Tyr	Tyr	Val	Asn	Asp	Gly	Val	Tyr	Gly	Ser	Phe	Asn	Cys	Ile	Leu	Tyr	325	330	335	
Asp	His	Ala	His	Val	Lys	Pro	Leu	Leu	Gln	Lys	Arg	Pro	Lys	Pro	Asp	340	345	350	
Glu	Lys	Tyr	Tyr	Ser	Ser	Ser	Ile	Trp	Gly	Pro	Thr	Cys	Asp	Gly	Leu	355	360	365	
Asp	Arg	Ile	Val	Glu	Arg	Cys	Asp	Leu	Pro	Glu	Met	His	Val	Gly	Asp	370	375	380	
Trp	Met	Leu	Phe	Glu	Asn	Met	Gly	Ala	Tyr	Thr	Val	Ala	Ala	Ala	Ser	385	390	395	400
Thr	Phe	Asn	Gly	Phe	Gln	Arg	Pro	Thr	Ile	Tyr	Tyr	Val	Met	Ser	Gly	405	410	415	

760

Pro Ala Trp Gln Leu Met Gln Gln Phe Gln Asn Pro Asp Phe Pro Pro  
 420 425 430

Glu Val Glu Glu Gln Asp Ala Ser Thr Leu Pro Val Ser Cys Ala Trp  
 435 440 445

Glu Ser Gly Met Lys Arg His Arg Ala Ala Cys Ala Ser Ala Ser Ile  
 450 455 460

Asn Val  
 465

<210> 730  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 730  
 Trp Cys Leu Lys Val His Cys Asn Trp Gly Ala Leu Glu Thr Ala Cys  
 1 5 10 15

Ser His Thr Thr Asp Gly Ser Leu Asp Thr Ser Ser Leu Gln Ala Arg  
 20 25 30

Gln Ile Asn Ile His Asn Leu Ser Ala Phe Tyr Asp Ser Glu Leu Phe  
 35 40 45

Arg Met Asn Lys Phe Ser His Asp Leu Lys Arg Lys Met Ile Leu Gln  
 50 55 60

Gln Phe  
 65

<210> 731  
 <211> 208  
 <212> PRT  
 <213> Homo sapiens

<400> 731  
 Val Val Ala Met Ala Gln Val Leu Arg Gly Thr Val Thr Asp Phe Pro  
 1 5 10 15

Gly Phe Asp Glu Arg Ala Asp Ala Glu Thr Leu Arg Lys Ala Met Lys  
 20 25 30

Gly Leu Gly Thr Asp Glu Glu Ser Ile Leu Thr Leu Leu Thr Ser Arg  
 35 40 45

761

Ser Asn Ala Gln Arg Gln Glu Ile Ser Ala Ala Phe Lys Thr Leu Phe  
 50 55 60  
 Gly Arg Asp Leu Leu Asp Asp Leu Lys Ser Glu Leu Thr Gly Lys Phe  
 65 70 75 80  
 Glu Lys Leu Ile Val Ala Leu Met Lys Pro Ser Arg Leu Tyr Asp Ala  
 85 90 95  
 Tyr Glu Leu Lys His Ala Leu Lys Gly Ala Gly Thr Asn Glu Lys Val  
 100 105 110  
 Leu Thr Glu Ile Ile Ala Ser Arg Thr Pro Glu Glu Leu Arg Ala Ile  
 115 120 125  
 Lys Gln Val Tyr Glu Glu Glu Tyr Gly Ser Ser Leu Glu Asp Asp Val  
 130 135 140  
 Val Gly Asp Thr Ser Gly Tyr Tyr Gln Arg Met Leu Val Val Leu Leu  
 145 150 155 160  
 Gln Ala Asn Arg Asp Pro Asp Ala Gly Ile Asp Glu Ala Gln Val Glu  
 165 170 175  
 Gln Asp Ala Gln Ala Leu Phe Gln Ala Gly Glu Leu Lys Trp Gly Thr  
 180 185 190  
 Asp Glu Glu Lys Phe Ile Thr Ile Phe Gly Thr Arg Ser Val Leu Ile  
 195 200 205

&lt;210&gt; 732

&lt;211&gt; 421

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 732

Val Gly Asp Cys Cys Val Pro Tyr Leu Asp Pro Glu Gly Thr Ser Leu  
 1 5 10 15  
 Leu Gly Trp Leu Ser Val Ser Leu Leu Ser Ser Gly Glu Ile Thr Ala  
 20 25 30  
 Ser Ser Ala Pro Arg Met Glu Pro Pro Gly Arg Arg Glu Cys Pro Phe  
 35 40 45

762

Pro Ser Trp Arg Phe Pro Gly Leu Leu Leu Ala Ala Met Val Leu Leu  
 50 55 60

Leu Tyr Ser Phe Ser Asp Ala Cys Glu Glu Pro Pro Thr Phe Glu Ala  
 65 70 75 80

Met Glu Leu Ile Gly Lys Pro Lys Pro Tyr Tyr Glu Ile Gly Glu Arg  
 85 90 95

Val Asp Tyr Lys Cys Lys Lys Gly Tyr Phe Tyr Ile Pro Pro Leu Ala  
 100 105 110

Thr His Thr Ile Cys Asp Arg Asn His Thr Trp Leu Pro Val Ser Asp  
 115 120 125

Asp Ala Cys Tyr Arg Glu Thr Cys Pro Tyr Ile Arg Asp Pro Leu Asn  
 130 135 140

Gly Gln Ala Val Pro Ala Asn Gly Thr Tyr Glu Phe Gly Tyr Gln Met  
 145 150 155 160

His Phe Ile Cys Asn Glu Gly Tyr Tyr Leu Ile Gly Glu Glu Ile Leu  
 165 170 175

Tyr Cys Glu Leu Lys Gly Ser Val Ala Ile Trp Ser Gly Lys Pro Pro  
 180 185 190

Ile Cys Glu Lys Val Leu Cys Thr Pro Pro Pro Lys Ile Lys Asn Gly  
 195 200 205

Lys His Thr Phe Ser Glu Val Glu Val Phe Glu Tyr Leu Asp Ala Val  
 210 215 220

Thr Tyr Ser Cys Asp Pro Ala Pro Gly Pro Asp Pro Phe Ser Leu Ile  
 225 230 235 240

Gly Glu Ser Thr Ile Tyr Cys Gly Asp Asn Ser Val Trp Ser Arg Ala  
 245 250 255

Ala Pro Glu Cys Lys Val Val Lys Cys Arg Phe Pro Val Val Glu Asn  
 260 265 270

Gly Lys Gln Ile Ser Gly Phe Gly Lys Lys Phe Tyr Tyr Lys Ala Thr  
 275 280 285

Val Met Phe Glu Cys Asp Lys Gly Phe Tyr Leu Asp Gly Ser Asp Thr  
 290 295 300

Ile Val Cys Asp Ser Asn Ser Thr Trp Asp Pro Pro Val Pro Lys Cys  
 305 310 315 320

[illegible]

<213> Homo sapiens

Asp	Ser	Met	Cys	Pro	Ala	Ser	Thr	Pro	Ser	Val	Leu	Ser	Ser	Glu	Gln
1				5					10					15	
Glu	Phe	Gln	Met	Phe	Pro	Lys	Ser	Arg	Leu	Ser	Ser	Val	Ser	Val	Thr
			20					25					30		
Tyr	Cys	Ser	Val	Ser	Gln	Asp	Phe	Pro	Gly	Ser	Asn	Leu	Asn	Leu	Leu
		35					40					45			
Thr	Asn	Asn	Ser	Gly	Thr	Glu	Trp	Glu	Ala	His	Pro	Asp	Gln	Leu	Leu
	50					55					60				
Arg	Gly	Pro	Arg	Lys	Gly	Arg	Ile	Glu	Asn	Val	Gln	Glu	Ser	Gly	Gln
65					70					75					80
Glu	Ala	Val	Ala	Leu	Leu	His	Pro	Lys	Pro	Arg	Leu	Leu	Thr	Arg	Leu
				85					90					95	
Pro	Pro	Leu	Trp	Gln	Gln	Arg	His	Ser							
			100					105							

764

&lt;210&gt; 734

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 734

Tyr Pro Ser Val Thr Ser Gly Thr Phe Arg Arg Lys Pro Asn Ser Ser  
1 5 10 15

Val Trp Cys Thr Arg Ser Ser Asp Val Phe Pro Pro Pro Asn Val Leu  
20 25 30

Val Lys Gln Thr Tyr Thr Ser Ser Glu Ala Thr Phe Gly Gln Ala Ser  
35 40 45

Arg Leu Gly Lys Cys Cys Thr Leu Cys Ile Lys Cys Ala Ser His Pro  
50 55 60

Ser Pro Leu Gly Lys Phe Leu Cys Ile Leu Gln Ala  
65 70 75

&lt;210&gt; 735

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 735

Asn Thr Ser Ile Asp Phe Ile Arg Val Phe Cys Gln Ser Arg Leu Phe  
1 5 10 15

Ser Asp Ser Ser Pro Pro Phe Leu Arg Thr Leu Asn Asn Ala Val Val  
20 25 30

Leu Ala Leu Ser Arg Lys Glu Lys Val Lys Pro Leu Phe Gly Gly Asn  
35 40 45

Ile Gly Leu Asn Ser Asp Cys Pro Phe Leu Ala Gly Pro Leu Thr Asn  
50 55 60

His Pro Ile Phe Phe Val Phe Leu  
65 70

&lt;210&gt; 736

&lt;211&gt; 412

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

765

&lt;400&gt; 736

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Pro Ala Ala Met Leu Arg Ala Ala Ala Arg Phe Gly Pro Arg Leu Gly
 1           5           10           15

Arg Arg Leu Leu Ser Ala Ala Ala Thr Gln Ala Val Pro Ala Pro Asn
      20           25           30

Gln Gln Pro Glu Val Phe Cys Asn Gln Ile Phe Ile Asn Asn Glu Trp
      35           40           45

His Asp Ala Val Ser Arg Lys Thr Phe Pro Thr Val Asn Pro Ser Thr
      50           55           60

Gly Glu Val Ile Cys Gln Val Ala Glu Gly Asp Lys Glu Asp Val Asp
      65           70           75           80

Lys Ala Val Lys Ala Ala Arg Ala Ala Phe Gln Leu Gly Ser Pro Trp
      85           90           95

Arg Arg Met Asp Ala Ser His Arg Gly Arg Leu Leu Asn Arg Leu Ala
      100          105          110

Asp Leu Ile Glu Arg Asp Arg Thr Tyr Leu Ala Ala Leu Glu Thr Leu
      115          120          125

Asp Asn Gly Lys Pro Tyr Val Ile Ser Tyr Leu Val Asp Leu Asp Met
      130          135          140

Val Leu Lys Cys Leu Arg Tyr Tyr Ala Gly Trp Ala Asp Lys Tyr His
      145          150          155          160

Gly Lys Thr Ile Pro Ile Asp Gly Asp Phe Phe Ser Tyr Thr Arg His
      165          170          175

Glu Pro Val Gly Val Cys Gly Gln Ile Ile Pro Trp Asn Phe Pro Leu
      180          185          190

Leu Met Gln Ala Trp Lys Leu Gly Pro Ala Leu Ala Thr Gly Asn Val
      195          200          205

Val Val Met Lys Val Ala Glu Gln Thr Pro Leu Thr Ala Leu Tyr Val
      210          215          220

Ala Asn Leu Ile Lys Glu Ala Gly Phe Pro Pro Gly Val Val Asn Ile
      225          230          235          240

Val Pro Gly Phe Gly Pro Thr Ala Gly Ala Ala Ile Ala Ser His Glu
      245          250          255

Asp Val Asp Lys Val Ala Phe Thr Gly Ser Thr Glu Ile Gly Arg Val

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766

260	265	270
Ile Gln Val Ala Ala Gly Ser Ser Asn Leu Lys Arg Val Thr Leu Glu		
275	280	285
Leu Gly Gly Lys Ser Pro Asn Ile Ile Met Ser Asp Ala Asp Met Asp		
290	295	300
Trp Ala Val Glu Gln Ala His Phe Ala Leu Phe Phe Asn Gln Gly Gln		
305	310	315
Cys Cys Cys Ala Gly Ser Arg Thr Phe Val Gln Glu Asp Ile Tyr Asp		
325	330	335
Glu Phe Val Glu Arg Ser Val Ala Arg Ala Lys Ser Arg Val Val Gly		
340	345	350
Asn Pro Phe Asp Ser Lys Thr Glu Gln Gly Pro Gln Trp Met Lys Leu		
355	360	365
Ser Leu Arg Arg Ser Ser Ala Thr Ser Thr Arg Gly Ser Lys Arg Gly		
370	375	380
Arg Ser Cys Cys Val Val Gly Ala Leu Leu Leu Thr Val Val Thr Ser		
385	390	395
Ser Ser Pro Leu Cys Leu Glu Met Cys Arg Met Ala		
405	410	

&lt;210&gt; 737

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 737

Val Gly Leu Ser Val Leu Arg Asn Leu Val Leu Ile Thr Val Phe Ala		
1	5	10
Val Leu Ser Trp Phe Leu Leu Val Leu Thr Val Cys Phe Leu Leu Lys		
20	25	30
Ala Cys Arg Ala Ser Leu Pro Cys Ser Val Gly Val Trp Gln Val Thr		
35	40	45
Asp Gly Glu Asp Ser Cys His Arg Ile Ser Asn Thr Ile Val Phe Leu		
50	55	60
His Val Leu Ser Trp Gly Cys Gly Gln Val Gly Val Gly Lys Glu Glu		
65	70	75
		80



767

Ala Leu Arg Ser Gly Gly Phe Phe Phe Ser Ser Pro Tyr Pro Val Ser  
                     85                    90                    95  
 Leu Pro Val Phe Leu Pro Leu Arg Gln Ala Gln Ser Val Phe Pro Gly  
                     100                    105                    110  
 Ala Gln Arg Ser Pro Arg Leu Leu Pro Arg Thr Pro Pro Arg Ala Glu  
                     115                    120                    125  
 Pro Ser Ala Glu Val Leu Ala Trp Ser Thr Leu Ile Pro Arg Phe Phe  
                     130                    135                    140  
 Ser Lys Thr Arg Pro Val Pro Phe Ser Thr Ala Ala Ser Gln Gln Arg  
                     145                    150                    155                    160  
 Ala Pro Gly Ser Pro Arg Ser Gln Leu Trp Leu Trp Thr Thr Trp Leu  
                     165                    170                    175  
 Arg Pro Leu Gly Leu Gln Ser Leu His Trp Val Tyr Leu Gly Leu Ile  
                     180                    185                    190  
 His Ser Trp Ser Gln Gly Trp Gly Phe Thr Cys Glu His Gln Thr Asp  
                     195                    200                    205  
 Leu Leu Ala Ser Arg Ala Val Asp Ser Leu Met Lys Ala Leu Val Arg  
                     210                    215                    220  
 Arg Lys His Ser Val Leu Arg Leu Leu Cys Asn Arg Phe Val Ile Met  
                     225                    230                    235                    240  
 Ser His Glu Lys Ser Asn Glu Leu Val Leu Leu Ile Val Thr Val Met  
                     245                    250                    255  
 Arg Ser Leu Thr Tyr Asn Ile Ala Val Val Ala Ala Trp Phe Asn Gly  
                     260                    265                    270  
 Cys Ile Arg  
                     275

&lt;210&gt; 738

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 738

Lys Asp Trp Lys Asn Thr Val Thr Asp Glu Glu Gln Thr Asn Val Pro  
           1                    5                    10                    15

768

Tyr Ile Tyr Ala Ile Gly Asp Ile Leu Glu Asp Lys Val Glu Leu Thr  
                   20                  25                  30  
 Pro Val Ala Ile Gln Ala Gly Arg Leu Leu Ala Gln Arg Leu Tyr Ala  
                   35                  40                  45  
 Gly Ser Thr Val Lys Cys Asp Tyr Glu Asn Val Pro Thr Thr Val Phe  
                   50                  55                  60  
 Thr Pro Leu Glu Tyr Gly Ala Cys Gly Leu Ser Glu Glu Lys Ala Val  
                   65                  70                  75                  80  
 Glu Lys Phe Gly Glu Glu Asn Ile Glu Val Tyr His Ser Tyr Phe Trp  
                   85                  90                  95  
 Pro Leu Glu Trp Thr Ile Pro Ser Arg Asp Asn Asn Lys Cys Tyr Ala  
                   100                  105                  110  
 Lys Ile Ile Cys Asn Thr Lys Asp Asn Glu Arg Val Val Gly Phe His  
                   115                  120                  125  
 Val Leu Gly Pro Asn Ala Gly Glu Val Thr Gln Gly Phe Ala Ala Ala  
                   130                  135                  140  
 Leu Lys Cys Gly Leu Thr Lys Lys Gln Leu Asp Ser Thr Ile Gly Ile  
                   145                  150                  155                  160  
 His Pro Val Cys Ala Glu Val Phe Thr Thr Leu Ser Val Thr Lys Arg  
                   165                  170                  175  
 Ser Gly Ala Ser Ile Leu Gln Ala Gly Cys  
                   180                  185

&lt;210&gt; 739

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 739

Lys Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg  
           1                  5                  10                  15  
 Val Arg Thr Val Leu Cys Glu Leu Ile Asn Ala Leu Tyr Pro Glu Gly  
                   20                  25                  30  
 Gln Ala Pro Val Lys Lys Ile Gln Ala Ser Thr Met Ala Phe Lys Gln  
                   35                  40                  45  
 Met Glu Gln Ile Ser Gln Phe Leu Gln Ala Ala Glu Arg Tyr Gly Ile

769

50	55	60
Asn Thr Thr Asp Ile Phe Gln Thr Val Asp Leu Trp Glu Gly Lys Asn		
65	70	75 80
Met Ala Cys Val Gln Arg Thr Leu Met Asn Leu Gly Gly Leu Ala Val		
	85	90 95
Ala Arg Asp Asp Gly Leu Phe Ser Gly Asp Pro Asn Trp Phe Pro Lys		
	100	105 110
Lys Ser Lys Glu Asn Pro Arg Asn Phe Ser Asp Asn Gln Leu Gln Glu		
	115	120 125
Gly Lys Asn Val Ile Gly Leu Gln Met Gly Thr Asn Arg Gly Ala Ser		
	130	135 140
Gln Ala Gly Met Thr Gly Tyr Gly Met Pro Arg Gln Ile Leu		
145	150	155

&lt;210&gt; 740

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 740

Asp Gln Glu Gly Glu Asn Pro Thr Thr Trp Lys Asp Phe Cys Phe His
1 5 10 15
Cys Leu Tyr Asp Val Ser His Ser Tyr Thr Tyr Lys Ser Leu Thr Arg
20 25 30
Gly Pro Leu Asn Cys Leu Val Phe Cys Glu Lys Gln Ile Phe Thr
35 40 45

&lt;210&gt; 741

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 741

Ala Gly Asp Ala Arg Cys Pro Pro Thr Pro Ala Pro Trp Pro Tyr Pro
1 5 10 15
His Leu His Pro His Pro Arg Ile Ala Ile Phe Arg Gly Gly Leu Gly
20 25 30

770

Gly Gly Val Arg Cys Phe Arg Ala Thr Glu Leu Lys His Lys Asp Pro  
           35                          40                          45  
 Ser Pro Ala His Pro Ala Gln Pro Gln Leu Thr Ser Met Pro Arg Glu  
           50                          55                          60  
 Lys Leu Pro Pro Pro Leu Pro Pro Pro Pro Thr Gln Ala Lys Ala Arg  
           65                          70                          75                          80  
 Ala Gly Leu Arg Val Ser Pro Ala Pro Ser Leu Thr Pro Leu Pro Pro  
                           85                          90                          95  
 Lys Thr Arg Leu Ser Ser Gln Thr Ser Leu Arg Ser Leu Ala Asn Pro  
                   100                          105                          110  
 Leu Ala Pro Lys Glu Lys Asp Pro Gly Pro Ser Pro Ile Thr Pro Lys  
           115                          120                          125  
 Arg Gly Ser Pro Ser Ser Gly Leu Glu Pro Leu Val Pro Pro Ser Val  
           130                          135                          140  
 Cys Pro Arg Gly Pro Leu Pro Arg Trp Pro Leu Gly Ile Lys Ala Trp  
           145                          150                          155                          160  
 Ala Ala Leu Arg Glu Gly Gly Arg Gly Arg Gly Trp Ser Gly Cys Ala  
                           165                          170                          175  
 Ile Gly Val Ser Gly Ser Phe Ser Ala Arg Val Gly Val Val Glu Trp  
           180                          185                          190  
 Gly Arg Glu Ala Ser Arg Ala Pro Glu Gly Ser Gly Arg Asp Glu Asn  
           195                          200                          205  
 Gln Leu Phe Thr  
           210

&lt;210&gt; 742

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 742

His Phe Gly Arg Pro Arg Gln Val Asp His Leu Arg Ser Gly Asp Gln  
           1                          5                          10                          15  
 Pro Gly Gln His Gly Glu Thr Pro Ser Leu Leu Lys Ile Gln Lys Leu  
                   20                          25                          30  
 Ala Gly Asn Arg Leu Asn Leu Gly Gly Gly Gly Ser Ser Glu Pro Arg

771

35                                      40                                      45  
 Ser Trp His Cys Thr Pro Thr  
     50                                      55  
  
 <210> 743  
 <211> 188  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (104)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 743  
 Pro Thr Arg Leu Arg Lys Arg Pro Ser Ser Gln Thr Asn Pro Ser Pro  
     1                                      5                                      10                                      15  
  
 Ser Ser Ser Arg Val Arg Asp Pro Val Gln Glu Arg Arg Ala Asn Ala  
                                     20                                      25                                      30  
  
 Thr Gly Ala His Leu Asp Lys Leu Asp Gln Gly Arg Leu Val Asp Leu  
                                     35                                      40                                      45  
  
 Val Asn Ala Ser Phe Gly Lys Lys Leu Arg Asp Asp Tyr Leu Ala Ser  
     50                                      55                                      60  
  
 Leu Arg Pro Arg Leu His Ser Ile Tyr Val Ser Glu Gly Tyr Asn Ala  
     65                                      70                                      75                                      80  
  
 Ala Ala Ile Leu Thr Met Glu Pro Val Leu Gly Gly Thr Pro Tyr Leu  
                                     85                                      90                                      95  
  
 Asp Lys Phe Val Val Ser Ser Xaa Arg Gln Gly Gln Gly Ser Gly Gln  
                                     100                                      105                                      110  
  
 Met Leu Trp Glu Cys Leu Arg Arg Asp Leu Gln Thr Leu Phe Trp Arg  
     115                                      120                                      125  
  
 Ser Arg Val Thr Asn Pro Ile Asn Pro Trp Tyr Phe Lys His Ser Asp  
     130                                      135                                      140  
  
 Gly Ser Phe Ser Asn Lys Gln Trp Ile Phe Phe Trp Phe Gly Leu Ala  
     145                                      150                                      155                                      160  
  
 Asp Ile Arg Asp Ser Tyr Glu Leu Val Asn His Ala Lys Gly Leu Pro  
                                     165                                      170                                      175

772

Asp Ser Phe His Lys Pro Ala Ser Asp Pro Gly Ser  
 180 185

<210> 744  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 744  
 Met Phe Pro Ile Tyr Ser Arg Gly Ser Tyr Gly Gly Gly Asp Gly Gly  
 1 5 10 15  
 Tyr Asn Gly Phe Gly Gly Asp Gly Gly Asn Tyr Gly Gly Gly Pro Gly  
 20 25 30  
 Tyr Ser Ser Arg Gly Gly Tyr Gly Gly Gly Gly Pro Gly Tyr Gly Asn  
 35 40 45  
 Gln Gly Gly Gly Tyr Gly Gly Gly Gly Tyr Asp Gly Tyr Asn Glu  
 50 55 60  
 Gly Gly Asn Phe Gly Gly Gly Asn Tyr Gly Gly Gly Gly Asn Tyr Asn  
 65 70 75 80  
 Asp Phe Gly Asn Tyr Ser Gly Gln Gln Gln Ser Asn Tyr Gly Pro Met  
 85 90 95  
 Lys Gly Gly Ser Phe Gly Gly Arg Ser Ser Gly Ser Pro Tyr Gly Gly  
 100 105 110  
 Gly Tyr Gly Ser Gly Gly Gly Ser Gly Gly Tyr Gly Ser Arg Arg Phe  
 115 120 125

<210> 745  
 <211> 241  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (31)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>

773

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 745

Glu	Ser	Arg	Glu	Gln	Ile	Leu	Pro	Val	Thr	Ser	Gly	Phe	Glu	Gly	Val
1				5					10					15	

Pro	Gly	Phe	Lys	Leu	Glu	Ser	Pro	Leu	Ser	Val	Pro	Lys	Arg	Xaa	Leu
			20					25					30		

Arg	Xaa	Ser	Phe	His	Pro	Xaa	Xaa	Lys	Thr	Ser	Phe	Trp	Met	Leu	Cys
		35					40					45			

Leu	Arg	Thr	Ser	Leu	Val	His	Lys	Met	Leu	His	Leu	Leu	Lys	Phe	Glu
50						55					60				

Asp	Ala	Lys	Leu	Ala	Ala	Ala	Ile	Ser	Glu	Val	Val	Ser	Gln	Thr	Pro
65					70					75					80

Ala	Ser	Thr	Thr	Gln	Ala	Gly	Ala	Pro	Pro	Arg	Asp	Thr	Ser	Gln	Ser
				85					90					95	

Asp	Lys	Asp	Leu	Asp	Asp	Ala	Leu	Asp	Lys	Leu	Ser	Asp	Ser	Leu	Gly
			100					105						110	

Gln	Arg	Gln	Pro	Asp	Pro	Asp	Glu	Asn	Lys	Pro	Met	Glu	Asp	Lys	Val
		115					120					125			

Lys	Glu	Lys	Ala	Lys	Ala	Glu	His	Arg	Asp	Lys	Leu	Gly	Glu	Arg	Asp
	130					135					140				

Asp	Thr	Ile	Pro	Pro	Glu	Tyr	Arg	His	Leu	Leu	Asp	Asp	Asn	Gly	Gln
145					150					155					160

Asp	Lys	Pro	Val	Lys	Pro	Pro	Thr	Lys	Lys	Ser	Glu	Asp	Ser	Lys	Lys
				165					170					175	

Pro	Ala	Asp	Asp	Gln	Asp	Pro	Ile	Asp	Ala	Leu	Ser	Gly	Asp	Leu	Asp
				180				185						190	

774

Ser Cys Pro Ser Thr Thr Glu Thr Ser Gln Asn Thr Ala Lys Asp Lys  
 195 200 205

Cys Lys Lys Ala Ala Ser Ser Ser Lys Ala Pro Lys Asn Gly Gly Lys  
 210 215 220

Ala Lys Asp Ser Ala Lys Thr Thr Glu Glu Thr Ser Lys Pro Lys Asp  
 225 230 235 240

Asp

<210> 746

<211> 186

<212> PRT

<213> Homo sapiens

<400> 746

Gln Ser Arg Gly Pro Gly Pro Val Thr Asp Gly Arg Gly Arg Glu Arg  
 1 5 10 15

Gly Gly Gly Asp Thr Met Ser Ser Pro Ser Pro Gly Lys Arg Arg Met  
 20 25 30

Asp Thr Asp Val Val Lys Leu Ile Glu Ser Lys His Glu Val Thr Ile  
 35 40 45

Leu Gly Gly Leu Asn Glu Phe Val Val Lys Phe Tyr Gly Pro Gln Gly  
 50 55 60

Thr Pro Tyr Glu Gly Gly Val Trp Lys Val Arg Val Asp Leu Pro Asp  
 65 70 75 80

Lys Tyr Pro Phe Lys Ser Pro Ser Ile Gly Phe Met Asn Lys Ile Phe  
 85 90 95

His Pro Asn Ile Asp Glu Ala Ser Gly Thr Val Cys Leu Asp Val Ile  
 100 105 110

Asn Gln Thr Trp Thr Ala Leu Tyr Asp Leu Thr Asn Ile Phe Glu Ser  
 115 120 125

Phe Leu Pro Gln Leu Leu Ala Tyr Pro Asn Pro Ile Asp Pro Leu Asn  
 130 135 140

Gly Asp Ala Ala Ala Met Tyr Leu His Arg Pro Glu Glu Tyr Lys Gln  
 145 150 155 160

Lys Ile Lys Glu Tyr Ile Gln Lys Tyr Ala Thr Glu Glu Phe Phe Leu



775

165 170 175

His Asn Leu Gln Phe Gln Glu Phe Asn Leu  
180 185

<210> 747  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 747  
Leu Cys Cys Phe Lys Tyr Leu Gly Asp Cys Phe Ile Ile Ser Ser Thr  
1 5 10 15  
Lys Lys Thr Phe Asn Phe Ala Ile Glu Thr Val Glu Leu Cys His Ala  
20 25 30  
Phe Ile Arg Ser Ser Ala Leu Cys  
35 40

<210> 748  
<211> 65  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 748  
Gln Met Cys Leu Gln Gly Tyr Gly Xaa Ser Ile Thr Asn Phe His Val  
1 5 10 15  
Tyr Leu Glu Val Phe Leu Asn Gly Ile Pro Lys Ser Arg Ser Leu Lys  
20 25 30  
Met Pro Ile Lys Val Asn Asn Ile Tyr Leu Lys Arg Thr Leu Asn Met  
35 40 45  
Pro Ser Phe Leu Ile Arg Asn Ile Phe Glu Thr Trp Val Phe Val Asn  
50 55 60  
Asn  
65

776

&lt;210&gt; 749

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 749

Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser Ala Val  
 1 5 10 15

Arg Gln Ala Glu Met Leu Asp Asp Leu Met Glu Lys Arg Lys Glu Lys  
 20 25 30

Leu Asp Ser Val Ile Glu Phe Ser Ile Pro Asp Ser Leu Leu Ile Arg  
 35 40 45

Arg Ile Thr Gly Arg Leu Ile His Pro Lys Ser Gly Arg Ser Tyr His  
 50 55 60

Glu Glu Phe Asn Pro Pro Lys Glu Pro Met Lys Asp Asp Ile Thr Gly  
 65 70 75 80

Glu Pro Leu Ile Arg Arg Ser Asp Asp Asn Glu Lys Ala Leu Lys Ile  
 85 90 95

Arg Leu Gln Ala Tyr His Thr Gln Thr Thr Pro Leu Ile Glu Tyr Tyr  
 100 105 110

Arg Lys Arg Gly Ile His Ser Ala Ile Asp Ala Ser Gln Thr Pro Asp  
 115 120 125

Val Val Phe Ala Ser Ile Leu Ala Ala Phe Ser Lys Ala Thr Ser  
 130 135 140

&lt;210&gt; 750

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 750

Thr Glu Leu Val Leu Ser Ile Pro Arg His Met Pro Ala Ala Tyr Ser  
 1 5 10 15

Arg Phe Leu Ser Trp Cys Leu Leu Ala Leu Gly Glu Glu Ala Lys Leu  
 20 25 30

Trp Leu Pro Ala Ser Arg Ala Lys Arg Val Arg Pro Trp Ile Glu Thr  
 35 40 45

777

Val Thr Ser Ile Ala Thr Pro Glu Arg Asn Asn Met Ala Val Lys Lys  
 50 55 60  
 Ser Arg Leu Lys Ser Lys Gln Lys Ala Gln Asp Thr Leu Gln Arg Val  
 65 70 75 80  
 Asn Gln Leu Lys Glu Glu Asn Glu Arg Leu Glu Ala Lys Ile Lys Leu  
 85 90 95  
 Leu Thr Lys Glu Leu Ser Val Leu Lys Asp Leu Phe Leu Glu His Ala  
 100 105 110  
 His Asn Leu Ala Asp Asn Val Gln Ser Ile Ser Thr Glu Asn Thr Thr  
 115 120 125  
 Ala Asp Gly Asp Asn Ala Gly Gln  
 130 135

&lt;210&gt; 751

&lt;211&gt; 885

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (306)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 751

Pro Xaa Val Xaa Ser Lys His Leu Lys Asp Ser Met Cys Asn Glu Phe  
 1 5 10 15

Ser Gln Ile Phe Gln Leu Cys Gln Phe Val Met Glu Asn Ser Gln Asn  
 20 25 30

Ala Pro Leu Val His Ala Thr Leu Glu Thr Leu Leu Arg Phe Leu Asn  
 35 40 45

Trp Ile Pro Leu Gly Tyr Ile Phe Glu Thr Lys Leu Ile Ser Thr Leu

778

50					55					60					
Ile	Tyr	Lys	Phe	Leu	Asn	Val	Pro	Met	Phe	Arg	Asn	Val	Ser	Leu	Lys
65					70					75					80
Cys	Leu	Thr	Glu	Ile	Ala	Gly	Val	Ser	Val	Ser	Gln	Tyr	Glu	Glu	Gln
				85					90					95	
Phe	Val	Thr	Leu	Phe	Thr	Leu	Thr	Met	Met	Gln	Leu	Lys	Gln	Met	Leu
			100					105					110		
Pro	Leu	Asn	Thr	Asn	Ile	Arg	Leu	Ala	Tyr	Ser	Asn	Gly	Lys	Asp	Asp
		115					120					125			
Glu	Gln	Asn	Phe	Ile	Gln	Asn	Leu	Ser	Leu	Phe	Leu	Cys	Thr	Phe	Leu
	130					135					140				
Lys	Glu	His	Asp	Gln	Leu	Ile	Glu	Lys	Arg	Leu	Asn	Leu	Arg	Glu	Thr
145					150					155					160
Leu	Met	Glu	Ala	Leu	His	Tyr	Met	Leu	Leu	Val	Ser	Glu	Val	Glu	Glu
				165					170					175	
Thr	Glu	Ile	Phe	Lys	Ile	Cys	Leu	Glu	Tyr	Trp	Asn	His	Leu	Ala	Ala
			180					185					190		
Glu	Leu	Tyr	Arg	Glu	Ser	Pro	Phe	Ser	Thr	Ser	Ala	Ser	Pro	Leu	Leu
	195						200					205			
Ser	Gly	Ser	Gln	His	Phe	Asp	Val	Pro	Pro	Arg	Arg	Gln	Leu	Tyr	Leu
	210					215					220				
Pro	Met	Leu	Phe	Lys	Val	Arg	Leu	Leu	Met	Val	Ser	Arg	Met	Ala	Lys
225					230					235					240
Pro	Glu	Glu	Val	Leu	Val	Val	Glu	Asn	Asp	Gln	Gly	Glu	Val	Val	Arg
			245					250					255		
Glu	Phe	Met	Lys	Asp	Thr	Asp	Ser	Ile	Asn	Leu	Tyr	Lys	Asn	Met	Arg
			260					265					270		
Glu	Thr	Leu	Val	Tyr	Leu	Thr	His	Leu	Asp	Tyr	Val	Asp	Thr	Glu	Arg
		275					280					285			
Ile	Met	Thr	Glu	Lys	Leu	His	Asn	Gln	Val	Asn	Gly	Thr	Glu	Trp	Ser
	290					295					300				
Trp	Xaa	Asn	Leu	Asn	Thr	Leu	Cys	Trp	Ala	Ile	Gly	Ser	Ile	Ser	Gly
305					310					315					320
Ala	Met	His	Glu	Glu	Asp	Glu	Lys	Arg	Phe	Leu	Val	Thr	Val	Ile	Lys

325								330				335					
Asp	Leu	Leu	Gly	Leu	Cys	Glu	Gln	Lys	Arg	Gly	Lys	Asp	Asn	Lys	Ala		
			340				345						350				
Ile	Ile	Ala	Ser	Asn	Ile	Met	Tyr	Ile	Val	Gly	Gln	Tyr	Pro	Arg	Phe		
			355				360						365				
Leu	Arg	Ala	His	Trp	Lys	Phe	Leu	Lys	Thr	Val	Val	Asn	Lys	Leu	Phe		
			370				375						380				
Glu	Phe	Met	His	Glu	Thr	His	Asp	Gly	Val	Gln	Asp	Met	Ala	Cys	Asp		
385						390						395			400		
Thr	Phe	Ile	Lys	Ile	Ala	Gln	Lys	Cys	Arg	Arg	His	Phe	Val	Gln	Val		
						405						410			415		
Gln	Val	Gly	Glu	Val	Met	Pro	Phe	Ile	Asp	Glu	Ile	Leu	Asn	Asn	Ile		
			420						425						430		
Asn	Thr	Ile	Ile	Cys	Asp	Leu	Gln	Pro	Gln	Gln	Val	His	Thr	Phe	Tyr		
			435						440						445		
Glu	Ala	Val	Gly	Tyr	Met	Ile	Gly	Ala	Gln	Thr	Asp	Gln	Thr	Val	Gln		
450						455						460					
Glu	His	Leu	Ile	Glu	Lys	Tyr	Met	Leu	Leu	Pro	Asn	Gln	Val	Trp	Asp		
465						470						475			480		
Ser	Ile	Ile	Gln	Gln	Ala	Thr	Lys	Asn	Val	Asp	Ile	Leu	Lys	Asp	Pro		
			485						490						495		
Glu	Thr	Val	Lys	Gln	Leu	Gly	Ser	Ile	Leu	Lys	Thr	Asn	Val	Arg	Ala		
			500						505						510		
Cys	Lys	Ala	Val	Gly	His	Pro	Phe	Val	Ile	Gln	Leu	Gly	Arg	Ile	Tyr		
			515						520						525		
Leu	Asp	Met	Leu	Asn	Val	Tyr	Lys	Cys	Leu	Ser	Glu	Asn	Ile	Ser	Ala		
530						535						540					
Ala	Ile	Gln	Ala	Asn	Gly	Glu	Met	Val	Thr	Lys	Gln	Pro	Leu	Ile	Arg		
545						550						555			560		
Ser	Met	Arg	Thr	Val	Lys	Arg	Glu	Thr	Leu	Lys	Leu	Ile	Ser	Gly	Trp		
			565						570						575		
Val	Ser	Arg	Ser	Asn	Asp	Pro	Gln	Met	Val	Ala	Glu	Asn	Phe	Val	Pro		
			580						585						590		
Pro	Leu	Leu	Asp	Ala	Val	Leu	Ile	Asp	Tyr	Gln	Arg	Asn	Val	Pro	Ala		

780

595	600	605
Ala Arg Glu Pro Glu Val Leu Ser Thr Met Ala Ile Ile Val Asn Lys		
610	615	620
Leu Gly Gly His Ile Thr Ala Glu Ile Pro Gln Ile Phe Asp Ala Val		
625	630	635 640
Phe Glu Cys Thr Leu Asn Met Ile Asn Lys Asp Phe Glu Glu Tyr Pro		
	645	650 655
Glu His Arg Thr Asn Phe Phe Leu Leu Leu Gln Ala Val Asn Ser His		
	660	665 670
Cys Phe Pro Ala Phe Leu Ala Ile Pro Pro Thr Gln Phe Lys Leu Val		
	675	680 685
Leu Asp Ser Ile Ile Trp Ala Phe Lys His Thr Met Arg Asn Val Ala		
	690	695 700
Asp Thr Gly Leu Gln Ile Leu Phe Thr Leu Leu Gln Asn Val Ala Gln		
	705	710 715 720
Glu Glu Ala Ala Ala Gln Ser Phe Tyr Gln Thr Tyr Phe Cys Asp Ile		
	725	730 735
Leu Gln His Ile Phe Ser Val Val Thr Asp Thr Ser His Thr Ala Gly		
	740	745 750
Leu Thr Met His Ala Ser Ile Leu Ala Tyr Met Phe Asn Leu Val Glu		
	755	760 765
Glu Gly Lys Ile Ser Thr Ser Leu Asn Pro Gly Asn Pro Val Asn Asn		
	770	775 780
Gln Ile Phe Leu Gln Glu Tyr Val Ala Asn Leu Leu Lys Ser Ala Phe		
	785	790 795 800
Pro His Leu Gln Asp Ala Gln Val Lys Leu Phe Val Thr Gly Leu Phe		
	805	810 815
Ser Leu Asn Gln Asp Ile Pro Ala Phe Lys Glu His Leu Arg Asp Phe		
	820	825 830
Leu Val Gln Ile Lys Glu Phe Ala Gly Glu Asp Thr Ser Asp Leu Phe		
	835	840 845
Leu Glu Glu Arg Glu Ile Ala Leu Arg Gln Ala Asp Glu Glu Lys His		
	850	855 860
Lys Arg Gln Met Ser Val Pro Gly Ile Phe Asn Pro His Glu Ile Pro		

781

865 870 875 880

Glu Glu Met Cys Asp  
885

&lt;210&gt; 752

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 752

Val Thr Phe Gly Val Ile Thr Ser Ile Ile Ile Trp Ala Leu Ala Ile  
1 5 10 15Leu Ala Ser Met Pro Gly Leu Tyr Phe Ser Lys Thr Gln Trp Glu Phe  
20 25 30Thr His His Thr Cys Ser Leu His Phe Pro His Glu Ser Leu Arg Glu  
35 40 45Trp Lys Leu Phe Gln Ala Leu Lys Leu Asn Leu Phe Gly Leu Val Leu  
50 55 60Pro Leu Leu Val Met Ile Ile Cys Tyr Thr Gly Ile Ile Lys Ile Leu  
65 70 75 80Leu Arg Arg Pro Asn Glu Lys Lys Ser Lys Ala Val Arg Leu Ile Phe  
85 90 95Val Ile Met Ile Ile Phe Phe Leu Phe Trp Thr Pro Tyr Asn Leu Thr  
100 105 110Ile Leu Ile Ser Val Phe Gln Asp Phe Leu Phe Thr His Glu Cys Glu  
115 120 125Gln Ser Arg His Leu Asp Leu Ala Val Gln Val Thr Glu Val Ile Ala  
130 135 140Tyr Thr His Cys Cys Val Asn Pro Val Ile Tyr Ala Phe Val Gly Glu  
145 150 155 160Arg Phe Arg Lys Tyr Leu Arg Gln Leu Phe His Arg Arg Val Ala Val  
165 170 175His Leu Val Lys Trp Leu Pro Phe Leu Ser Val Asp Arg Leu Glu Arg  
180 185 190Val Ser Ser Thr Ser Pro Ser Thr Gly Glu His Glu Leu Ser Ala Gly  
195 200 205

782

Phe

&lt;210&gt; 753

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 753

Leu	Ser	Val	Ala	Ser	Leu	Ser	Phe	Leu	Pro	Asn	Ala	Ser	Ala	Glu	Asp
1				5					10					15	
Thr	Met	Ser	Arg	Leu	Ser	Arg	Ser	Leu	Leu	Trp	Ala	Ala	Thr	Cys	Leu
			20					25					30		
Gly	Val	Leu	Cys	Val	Leu	Ser	Ala	Asp	Lys	Asn	Thr	Thr	Gln	His	Pro
		35					40					45			
Asn	Val	Thr	Thr	Leu	Ala	Pro	Ile	Ser	Asn	Val	Thr	Ser	Ala	Pro	Val
		50				55					60				
Thr	Ser	Leu	Pro	Leu	Val	Thr	Thr	Pro	Ala	Pro	Glu	Thr	Cys	Glu	Gly
65					70					75					80
Arg	Asn	Ser	Cys	Val	Ser	Cys	Phe	Asn	Val	Ser	Val	Val	Asn	Thr	Thr
				85					90					95	
Cys	Phe	Trp	Ile	Glu	Cys	Lys	Asp	Glu	Ser	Tyr	Cys	Ser	His	Asn	Ser
			100					105					110		
Thr	Val	Ser	Asp	Cys	Gln	Val	Gly	Asn	Thr	Thr	Asp	Phe	Cys	Ser	Val
			115				120					125			
Ser	Thr	Ala	Thr	Pro	Val	Pro	Thr	Ala	Asn	Ser	Thr	Ala	Lys	Pro	Thr
						135					140				
Val	Gln	Pro	Ser	Pro	Ser	Thr	Thr	Ser	Lys	Thr	Val	Thr	Thr	Ser	Gly
145					150					155					160
Thr	Thr	Asn	Asn	Thr	Val	Thr	Pro	Thr	Ser	Gln	Pro	Val	Arg	Lys	Ser
					165				170					175	
Thr	Phe	Asp	Ala	Ala	Ser	Phe	Ile	Gly	Gly	Ile	Val	Leu	Val	Leu	Gly
			180					185					190		
Val	Gln	Ala	Val	Ile	Phe	Phe	Leu	Tyr	Lys	Phe	Cys	Lys	Ser	Lys	Glu
			195				200					205			



783

Arg Asn Tyr His Thr Leu  
210

<210> 754

<211> 363

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (231)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 754

Pro Arg Pro Arg Glu Pro Gln Val Leu Ala Ala Gly Asp Val Arg Ser  
1 5 10 15

Pro Ser Asp Pro Arg Arg Val Lys Ala Asn Leu Ser Glu Val Leu Val  
20 25 30

Tyr Ser Val Leu Gly Val Asn Val Thr Ser Thr Glu Val Tyr Gly Ala  
35 40 45

Phe Thr Cys Ser Ile Gln Asn Ile Ser Phe Ser Ser Phe Thr Leu Gln  
50 55 60

Arg Ala Gly Pro Thr Ser His Val Ala Ala Val Leu Ala Ser Leu Leu  
65 70 75 80

Val Leu Leu Ala Leu Leu Leu Ala Ala Leu Leu Tyr Val Lys Cys Arg  
85 90 95

Leu Asn Val Leu Leu Trp Tyr Gln Asp Ala Tyr Gly Glu Val Glu Ile  
100 105 110

Asn Asp Gly Lys Leu Tyr Asp Ala Tyr Val Ser Tyr Ser Asp Cys Pro  
115 120 125

Glu Asp Arg Lys Phe Val Asn Phe Ile Leu Lys Pro Gln Leu Glu Arg  
130 135 140

Arg Arg Gly Tyr Lys Leu Phe Leu Asp Asp Arg Asp Leu Leu Pro Arg  
145 150 155 160

Ala Glu Pro Ser Ala Asp Leu Leu Val Asn Leu Ser Arg Cys Arg Arg  
165 170 175

Leu Ile Val Val Leu Ser Asp Ala Phe Leu Ser Arg Ala Trp Cys Ser  
180 185 190

784

His Ser Phe Arg Glu Gly Leu Cys Arg Leu Leu Glu Leu Thr Arg Arg  
 195 200 205

Pro Ile Phe Ile Thr Phe Glu Gly Gln Arg Arg Asp Pro Ala His Pro  
 210 215 220

Ala Leu Arg Leu Leu Arg Xaa His Arg His Leu Val Thr Leu Leu Leu  
 225 230 235 240

Trp Arg Pro Gly Ser Val Thr Pro Ser Ser Asp Phe Trp Lys Glu Val  
 245 250 255

Gln Leu Ala Leu Pro Arg Lys Val Arg Tyr Arg Pro Val Glu Gly Asp  
 260 265 270

Pro Gln Thr Gln Leu Gln Asp Asp Lys Asp Pro Met Leu Ile Leu Arg  
 275 280 285

Gly Arg Val Pro Glu Gly Arg Ala Leu Asp Ser Glu Val Asp Pro Asp  
 290 295 300

Pro Glu Gly Asp Leu Gly Val Arg Gly Pro Val Phe Gly Glu Pro Ser  
 305 310 315 320

Ala Pro Pro His Thr Ser Gly Val Ser Leu Gly Glu Ser Arg Ser Ser  
 325 330 335

Glu Val Asp Val Ser Asp Leu Gly Ser Arg Asn Tyr Ser Ala Arg Thr  
 340 345 350

Asp Phe Tyr Cys Leu Val Ser Lys Asp Asp Met  
 355 360

<210> 755

<211> 232

<212> PRT

<213> Homo sapiens

<400> 755

Pro Val Gln Pro Thr His Ala Pro Gly Thr Thr Ala Ala Ala His Asn  
 1 5 10 15

Thr Thr Arg Thr Ala Ala Pro Ala Ser Thr Val Pro Gly Pro Thr Leu  
 20 25 30

Ala Pro Gln Pro Ser Ser Val Lys Thr Gly Ile Tyr Gln Val Leu Asn  
 35 40 45

785

Gly Ser Arg Leu Cys Ile Lys Ala Glu Met Gly Ile Gln Leu Ile Val  
 50 55 60  
 Gln Asp Lys Glu Ser Val Phe Ser Pro Arg Arg Tyr Phe Asn Ile Asp  
 65 70 75 80  
 Pro Asn Ala Thr Gln Ala Ser Gly Asn Cys Gly Thr Arg Lys Ser Asn  
 85 90 95  
 Leu Leu Leu Asn Phe Gln Gly Gly Phe Val Asn Leu Thr Phe Thr Lys  
 100 105 110  
 Asp Glu Glu Ser Tyr Tyr Ile Ser Glu Val Gly Ala Tyr Leu Thr Val  
 115 120 125  
 Ser Asp Pro Glu Thr Val Tyr Gln Gly Ile Lys His Ala Val Val Met  
 130 135 140  
 Phe Gln Thr Ala Val Gly His Ser Phe Lys Cys Val Ser Glu Gln Ser  
 145 150 155 160  
 Leu Gln Leu Ser Ala His Leu Gln Val Lys Thr Thr Asp Val Gln Leu  
 165 170 175  
 Gln Ala Phe Asp Phe Glu Asp Asp His Phe Gly Asn Val Asp Glu Cys  
 180 185 190  
 Ser Ser Asp Tyr Thr Ile Val Leu Pro Val Ile Gly Ala Ile Val Val  
 195 200 205  
 Gly Leu Cys Leu Met Gly Met Gly Val Tyr Lys Ile Arg Leu Arg Cys  
 210 215 220  
 Gln Ser Ser Gly Tyr Gln Arg Ile  
 225 230

&lt;210&gt; 756

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 756

Lys Leu Leu Pro Val Val Ile Ile Ala Val Gly Val Phe Leu Phe Leu  
 1 5 10 15  
 Val Ala Phe Val Gly Cys Cys Gly Ala Cys Lys Glu Asn Tyr Cys Leu  
 20 25 30  
 Met Ile Thr Phe Ala Ile Phe Leu Ser Leu Ile Met Leu Val Glu Val

786

```

          35              40              45
Ala Ala Ala Ile Ala Gly Tyr Val Phe Arg Asp Lys Val Met Ser Glu
   50              55              60
Phe Asn Asn Asn Phe Arg Gln Gln Met Glu Asn Tyr Pro Lys Asn Asn
   65              70              75              80
His Thr Ala Ser Ile Leu Asp Arg Met Gln Ala Asp Phe Lys Cys Cys
          85              90              95
Gly Ala Ala Asn Tyr Thr Asp Trp Glu Lys Ile Pro Ser Met Ser Lys
          100              105              110
Asn Arg Val Pro Asp Ser Cys Cys Ile Asn Val Thr Val Gly Leu Gly
          115              120              125

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&lt;210&gt; 757

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (210)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 757

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Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu
   1              5              10              15
Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro
          20              25              30
Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln
          35              40              45
Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys
          50              55              60
His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys
          65              70              75              80
Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe
          85              90              95

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787

Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr  
 100 105 110  
 Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile  
 115 120 125  
 Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val  
 130 135 140  
 Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu  
 145 150 155 160  
 Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu  
 165 170 175  
 Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His  
 180 185 190  
 Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala  
 195 200 205  
 Gly Xaa Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu  
 210 215 220  
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe  
 225 230 235 240  
 Pro Gly Glu Lys Asp Phe Arg Ile Ile Gly Leu Ser Gln Phe Leu His  
 245 250 255

Ser

<210> 758  
 <211> 319  
 <212> PRT  
 <213> Homo sapiens

<400> 758  
 Pro Gly Ser Thr His Ala Ser Gly Lys Ile Gln Asn Lys Trp Leu Arg  
 1 5 10 15  
 Pro Ser Pro Arg Ser His Arg Thr Pro Glu Ser Gly Arg Val Leu Ser  
 20 25 30  
 Leu Phe Arg Leu Pro Pro Pro Gly Met Ala Leu Ser Gly Ser Thr Pro  
 35 40 45  
 Ala Pro Cys Trp Glu Glu Asp Glu Cys Leu Asp Tyr Tyr Gly Met Leu

788

50					55					60					
Ser	Leu	His	Arg	Met	Phe	Glu	Val	Val	Gly	Gly	Gln	Leu	Thr	Glu	Cys
65					70					75					80
Glu	Leu	Glu	Leu	Leu	Ala	Phe	Leu	Leu	Asp	Glu	Ala	Pro	Gly	Ala	Ala
				85					90					95	
Gly	Gly	Leu	Ala	Arg	Ala	Arg	Ser	Gly	Leu	Glu	Leu	Leu	Leu	Glu	Leu
			100					105					110		
Glu	Arg	Arg	Gly	Gln	Cys	Asp	Glu	Ser	Asn	Leu	Arg	Leu	Leu	Gly	Gln
			115					120				125			
Leu	Leu	Arg	Val	Leu	Ala	Arg	His	Asp	Leu	Leu	Pro	His	Leu	Ala	Arg
			130				135					140			
Lys	Arg	Arg	Arg	Pro	Val	Ser	Pro	Glu	Arg	Tyr	Ser	Tyr	Gly	Thr	Ser
145							150					155			160
Ser	Ser	Ser	Lys	Arg	Thr	Glu	Gly	Ser	Cys	Arg	Arg	Arg	Arg	Gln	Ser
			165						170					175	
Ser	Ser	Ser	Ala	Asn	Ser	Gln	Gln	Gly	Gln	Trp	Glu	Thr	Gly	Ser	Pro
			180					185					190		
Pro	Thr	Lys	Arg	Gln	Arg	Arg	Ser	Arg	Gly	Arg	Pro	Ser	Gly	Gly	Ala
			195				200					205			
Arg	Arg	Arg	Arg	Arg	Gly	Ala	Pro	Ala	Ala	Pro	Gln	Gln	Gln	Ser	Glu
			210				215					220			
Pro	Ala	Arg	Pro	Ser	Ser	Glu	Gly	Lys	Val	Thr	Cys	Asp	Ile	Arg	Leu
225							230					235			240
Arg	Val	Arg	Ala	Glu	Tyr	Cys	Glu	His	Gly	Pro	Ala	Leu	Glu	Gln	Gly
			245						250					255	
Val	Ala	Ser	Arg	Arg	Pro	Gln	Ala	Leu	Ala	Arg	Gln	Leu	Asp	Val	Phe
			260					265					270		
Gly	Gln	Ala	Thr	Ala	Val	Leu	Arg	Ser	Arg	Asp	Leu	Gly	Ser	Val	Val
			275				280					285			
Cys	Asp	Ile	Lys	Phe	Ser	Glu	Leu	Ser	Tyr	Leu	Asp	Ala	Phe	Trp	Gly
			290				295					300			
Asp	Tyr	Leu	Ser	Gly	Ala	Leu	Leu	Gln	Pro	Cys	Gly	Ala	Cys	Ser	
305							310					315			

789

<210> 759  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (147)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 759  
 Glu Ser Trp Leu Val Leu Gly Arg Arg Lys Ala Gly Arg Leu Ile Gly  
   1                  5                  10                  15  
 Ala Cys Gly Phe Glu Pro Pro His Phe Leu Thr Leu Asp Leu Glu Met  
                   20                  25                  30  
 His Arg Asp Ser Cys Pro Leu Asp Cys Lys Val Tyr Val Gly Asn Leu  
           35                  40                  45  
 Gly Asn Asn Gly Asn Lys Thr Glu Leu Glu Arg Ala Phe Gly Tyr Tyr  
   50                  55                  60  
 Gly Pro Leu Arg Ser Val Trp Val Ala Arg Asn Pro Pro Gly Phe Ala  
   65                  70                  75                  80  
 Phe Val Glu Phe Glu Asp Pro Arg Asp Ala Ala Asp Ala Val Arg Glu  
                   85                  90                  95  
 Leu Asp Gly Arg Thr Leu Cys Gly Cys Arg Val Arg Val Glu Leu Ser  
           100                  105                  110  
 Asn Gly Glu Lys Arg Ser Arg Asn Arg Gly Pro Pro Pro Ser Trp Gly  
           115                  120                  125  
 Arg Arg Pro Arg Asp Asp Tyr Arg Arg Arg Ser Pro Pro Pro Arg Arg  
   130                  135                  140  
 Arg Val Xaa Ile Met Ser Leu Leu Thr Thr Leu  
 145                  150                  155

<210> 760  
 <211> 753  
 <212> PRT  
 <213> Homo sapiens

<400> 760  
 Leu Lys Lys Gly Ala Ala Glu Glu Ala Glu Leu Glu Asp Ser Asp Asp

790

1	5	10	15
Glu Glu Lys Pro Val Lys Gln Asp Asp Phe Pro Lys Asp Phe Gly Pro	20	25	30
Arg Lys Leu Lys Thr Gly Gly Asn Phe Lys Pro Ser Gln Lys Gly Phe	35	40	45
Ala Gly Gly Thr Lys Ser Phe Met Asp Phe Gly Ser Trp Glu Arg His	50	55	60
Thr Lys Gly Ile Gly Gln Lys Leu Leu Gln Lys Met Gly Tyr Val Pro	65	70	75
Gly Arg Gly Leu Gly Lys Asn Ala Gln Gly Ile Ile Asn Pro Ile Glu	85	90	95
Ala Lys Gln Arg Lys Gly Lys Gly Ala Val Gly Ala Tyr Gly Ser Glu	100	105	110
Arg Thr Thr Gln Ser Met Gln Asp Phe Pro Val Val Asp Ser Glu Glu	115	120	125
Glu Ala Glu Glu Glu Phe Gln Lys Glu Leu Ser Gln Trp Arg Lys Asp	130	135	140
Pro Ser Gly Ser Lys Lys Lys Pro Lys Tyr Ser Tyr Lys Thr Val Glu	145	150	155
Glu Leu Lys Ala Lys Gly Arg Ile Ser Lys Lys Leu Thr Ala Pro Gln	165	170	175
Lys Glu Leu Ser Gln Val Lys Val Ile Asp Met Thr Gly Arg Glu Gln	180	185	190
Lys Val Tyr Tyr Ser Tyr Ser Gln Ile Ser His Lys His Asn Val Pro	195	200	205
Asp Asp Gly Leu Pro Leu Gln Ser Gln Gln Leu Pro Gln Ser Gly Lys	210	215	220
Glu Ala Lys Ala Pro Gly Phe Ala Leu Pro Glu Leu Glu His Asn Leu	225	230	235
Gln Leu Leu Ile Asp Leu Thr Glu Gln Glu Ile Ile Gln Asn Asp Arg	245	250	255
Gln Leu Gln Tyr Glu Arg Asp Met Val Val Asn Leu Phe His Glu Leu	260	265	270
Glu Lys Met Thr Glu Val Leu Asp His Glu Glu Arg Val Ile Ser Asn			



791

275		280		285
Leu Ser Lys Val Leu Glu Met Val Glu Glu Cys Glu Arg Arg Met Gln				
290		295		300
Pro Asp Cys Ser Asn Pro Leu Thr Leu Asp Glu Cys Ala Arg Ile Phe				
305		310		315
Glu Thr Leu Gln Asp Lys Tyr Tyr Glu Glu Tyr Arg Met Ser Asp Arg				
		325		330
				335
Val Asp Leu Ala Val Ala Ile Val Tyr Pro Leu Met Lys Glu Tyr Phe				
		340		345
				350
Lys Glu Trp Asp Pro Leu Lys Asp Cys Thr Tyr Gly Thr Glu Ile Ile				
		355		360
				365
Ser Lys Trp Lys Ser Leu Leu Glu Asn Asp Gln Leu Leu Ser His Gly				
		370		375
				380
Gly Gln Asp Leu Ser Ala Asp Ala Phe His Arg Leu Ile Trp Glu Val				
385		390		395
				400
Trp Met Pro Phe Val Arg Asn Ile Val Thr Gln Trp Gln Pro Arg Asn				
		405		410
				415
Cys Asp Pro Met Val Asp Phe Leu Asp Ser Trp Val His Ile Ile Pro				
		420		425
				430
Val Trp Ile Leu Asp Asn Ile Leu Asp Gln Leu Ile Phe Pro Lys Leu				
		435		440
				445
Gln Lys Glu Val Glu Asn Trp Asn Pro Leu Thr Asp Thr Val Pro Ile				
		450		455
				460
His Ser Trp Ile His Pro Trp Leu Pro Leu Met Gln Ala Arg Leu Glu				
465		470		475
				480
Pro Leu Tyr Ser Pro Ile Arg Ser Lys Leu Ser Ser Ala Leu Gln Lys				
		485		490
				495
Trp His Pro Ser Asp Ser Ser Ala Lys Leu Ile Leu Gln Pro Trp Lys				
		500		505
				510
Asp Val Phe Thr Pro Gly Ser Trp Glu Ala Phe Met Val Lys Asn Ile				
		515		520
				525
Val Pro Lys Leu Gly Met Cys Leu Gly Glu Leu Val Ile Asn Pro His				
		530		535
				540
Gln Gln His Met Asp Ala Phe Tyr Trp Val Ile Asp Trp Glu Gly Met				

792

545		550		555		560
Ile Ser Val Ser Ser Leu Val Gly Leu Leu Glu Lys His Phe Phe Pro						
	565			570		575
Lys Trp Leu Gln Val Leu Cys Ser Trp Leu Ser Asn Ser Pro Asn Tyr						
	580		585			590
Glu Glu Ile Thr Lys Trp Tyr Leu Gly Trp Lys Ser Met Phe Ser Asp						
	595		600			605
Gln Val Leu Ala His Pro Ser Val Lys Asp Lys Phe Asn Glu Ala Leu						
	610		615			620
Asp Ile Met Asn Arg Ala Val Ser Ser Asn Val Gly Ala Tyr Met Gln						
625		630		635		640
Pro Gly Ala Arg Glu Asn Ile Ala Tyr Leu Thr His Thr Glu Arg Arg						
	645		650			655
Lys Asp Phe Gln Tyr Glu Ala Met Gln Glu Arg Arg Glu Ala Glu Asn						
	660		665			670
Met Ala Gln Arg Gly Ile Gly Val Ala Ala Ser Ser Val Pro Met Asn						
	675		680			685
Phe Lys Asp Leu Ile Glu Thr Lys Ala Glu Glu His Asn Ile Val Phe						
	690		695			700
Met Pro Val Ile Gly Lys Arg His Glu Gly Lys Gln Leu Tyr Thr Phe						
705		710		715		720
Gly Arg Ile Val Ile Tyr Ile Asp Arg Gly Val Val Phe Val Gln Gly						
	725		730			735
Glu Lys Thr Trp Val Pro Thr Ser Leu Gln Ser Leu Ile Asp Met Ala						
	740		745			750

Lys

&lt;210&gt; 761

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

793

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 761

Val	Ala	Lys	Asp	Met	Ala	Ala	Ala	Xaa	Val	Arg	Cys	Ile	Arg	Lys	Glu
1				5					10					15	

Ile	Arg	Asp	Leu	Tyr	Val	Asn	Ile	Gln	Pro	Val	Gln	Glu	Pro	Lys	Asp
			20					25					30		

Gln	Ala	Phe	Gly	Asn	Gly	Asn	Gly	Ile	Ile	Ile	Ile	Ala	Glu	Thr	Ser
		35					40					45			

Thr	Gly	Cys	Leu	Phe	Ala	Gly	Ser	Ser	Leu	Gly	Lys	Arg	Gly	Val	Asn
	50					55					60				

Ala	Asp	Lys	Val	Gly	Ile	Glu	Ala	Ala	Glu	Met	Leu	Leu	Ala	Asn	Leu
65					70					75					80

Arg	His	Gly	Gly	Thr	Val	Asp	Glu	Tyr	Leu	Gln	Asp	Gln	Leu	Ile	Val
				85					90					95	

Phe	Met	Ala	Leu	Ala	Asn	Gly	Val	Ser	Arg	Ile	Lys	Thr	Gly	Pro	Val
			100					105					110		

Thr	Leu	His	Thr	Gln	Thr	Ala	Ile	His	Phe	Ala	Glu	Gln	Ile	Ala	Lys
		115					120					125			

Ala	Lys	Phe	Ile	Val	Lys	Lys	Ser	Glu	Asp	Glu	Glu	Asp	Ala	Ala	Lys
	130					135					140				

Asp	Thr	Tyr	Ile	Ile	Glu	Cys	Gln	Gly	Ile	Gly	Met	Thr	Asn	Pro	Asn
145					150					155					160

Leu

&lt;210&gt; 762

&lt;211&gt; 491

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (78)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (158)

794

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (401)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (457)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 762

Ile	Thr	Cys	Pro	Leu	Phe	Leu	Gly	Gly	Pro	Ser	Pro	Ala	Glu	Asp	Arg
1				5					10					15	

Cys	Ala	Ile	Glu	Leu	Ser	Arg	Arg	Gly	Arg	Val	Pro	Leu	Gly	Arg	His
			20					25					30		

Arg	Ala	Glu	Pro	Ser	Pro	Pro	Ala	Phe	Cys	Ser	Lys	Val	Glu	Gly	Tyr
		35					40					45			

Gly	Ser	Val	Cys	Ser	Cys	Lys	Asp	Pro	Thr	Pro	Ile	Glu	Phe	Ser	Pro
	50					55					60				

Asp	Pro	Leu	Pro	Asp	Asn	Lys	Val	Leu	Asn	Val	Pro	Val	Xaa	Val	Ile
65					70					75					80

Ala	Gly	Asn	Arg	Pro	Asn	Tyr	Leu	Tyr	Arg	Met	Leu	Arg	Ser	Leu	Leu
				85					90					95	

Ser	Ala	Gln	Gly	Val	Ser	Pro	Gln	Met	Ile	Thr	Val	Phe	Ile	Asp	Gly
		100					105						110		

Tyr	Tyr	Glu	Glu	Pro	Met	Asp	Val	Val	Ala	Leu	Phe	Gly	Leu	Arg	Gly
		115					120					125			

Ile	Gln	His	Thr	Pro	Ile	Ser	Ile	Lys	Asn	Ala	Arg	Val	Ser	Gln	His
	130						135				140				

Tyr	Lys	Ala	Ser	Leu	Thr	Ala	Thr	Phe	Asn	Leu	Phe	Pro	Xaa	Ala	Lys
145				150						155				160	

Phe	Ala	Val	Val	Leu	Glu	Glu	Asp	Leu	Asp	Ile	Ala	Val	Asp	Phe	Phe
				165				170						175	

Ser	Phe	Leu	Ser	Gln	Ser	Ile	His	Leu	Leu	Glu	Glu	Asp	Asp	Ser	Leu
		180						185					190		

Tyr	Cys	Ile	Ser	Ala	Trp	Asn	Asp	Gln	Gly	Tyr	Glu	His	Thr	Ala	Glu
	195					200						205			

795

Asp	Pro	Ala	Leu	Leu	Tyr	Arg	Val	Glu	Thr	Met	Pro	Gly	Leu	Gly	Trp
210						215					220				
Val	Leu	Arg	Arg	Ser	Leu	Tyr	Lys	Glu	Glu	Leu	Glu	Pro	Lys	Trp	Pro
225					230					235					240
Thr	Pro	Glu	Lys	Leu	Trp	Asp	Trp	Asp	Met	Trp	Met	Arg	Met	Pro	Glu
				245					250					255	
Gln	Arg	Arg	Gly	Arg	Glu	Cys	Ile	Ile	Pro	Asp	Val	Ser	Arg	Ser	Tyr
			260					265					270		
His	Phe	Gly	Ile	Val	Gly	Leu	Asn	Met	Asn	Gly	Tyr	Phe	His	Glu	Ala
		275					280					285			
Tyr	Phe	Lys	Lys	His	Lys	Phe	Asn	Thr	Val	Pro	Gly	Val	Gln	Leu	Arg
	290					295					300				
Asn	Val	Asp	Ser	Leu	Lys	Lys	Glu	Ala	Tyr	Glu	Val	Glu	Val	His	Arg
305					310					315					320
Leu	Leu	Ser	Glu	Ala	Glu	Val	Leu	Asp	His	Ser	Lys	Asn	Pro	Cys	Glu
				325					330					335	
Asp	Ser	Phe	Leu	Pro	Asp	Thr	Glu	Gly	His	Thr	Tyr	Val	Ala	Phe	Ile
			340					345					350		
Arg	Met	Glu	Lys	Asp	Asp	Asp	Phe	Thr	Thr	Trp	Thr	Gln	Leu	Ala	Lys
		355					360					365			
Cys	Leu	His	Ile	Trp	Asp	Leu	Asp	Val	Arg	Gly	Asn	His	Arg	Gly	Leu
	370					375					380				
Trp	Arg	Leu	Phe	Arg	Lys	Lys	Asn	His	Phe	Leu	Val	Val	Gly	Val	Pro
385					390				395						400
Xaa	Ser	Pro	Tyr	Ser	Pro	Gly	Ser	Glu	Ser	Asn	Leu	Phe	Ile	Asp	Cys
				405					410					415	
Pro	Glu	Gly	Leu	Glu	Asn	Arg	Pro	Asn	Leu	Glu	Gly	Leu	Asp	Phe	Phe
			420					425					430		
Leu	Gly	Trp	Asn	Ala	Ala	Leu	Arg	Val	Gly	Leu	Ala	Leu	Thr	Gln	Glu
			435				440					445			
Thr	Ala	Val	Pro	Asn	Pro	Trp	Thr	Xaa	Pro	Ala	Gly	Ala	His	Met	Leu
	450					455					460				
Thr	Gln	Thr	His	Ser	Glu	Thr	Leu	Arg	His	Trp	Thr	Arg	Pro	Pro	Leu
465					470					475					480

796

Ser Leu Leu Phe Val Gln Ile Ser Lys Ala Gly  
 485 490

&lt;210&gt; 763

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 763

Leu Pro Gln Leu Asn Gly Tyr Ile Glu Lys Ser Thr Pro Tyr Glu Cys  
 1 5 10 15

Gly Phe Asp Pro Ile Ser Pro Ala Arg Val Pro Phe Ser Ile Lys Phe  
 20 25 30

Phe Leu Val Ala Ile Thr Phe Leu Leu Phe Asp Leu Glu Ile Ala Leu  
 35 40 45

Leu Leu Pro Leu Pro  
 50

&lt;210&gt; 764

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 764

His Ala Ser Ala His Ala Ser Ala His Ala Ser Gly Arg Arg Lys Lys  
 1 5 10 15

Glu Arg Lys Glu Lys Arg Arg Gln Arg Lys Gly Glu Glu Cys Ser Leu  
 20 25 30

Pro Gly Leu Thr Cys Phe Thr His Asp Asn Asn His Trp Gln Thr Ala  
 35 40 45

Pro Phe Trp Asn Leu Gly Ser Phe Cys Ala Cys Thr Ser Ser Asn Asn  
 50 55 60

Asn Thr Tyr Trp Cys Leu Arg Thr Val Asn Glu Thr His Asn Phe Leu  
 65 70 75 80

Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Met Asn Thr  
 85 90 95

Asp Pro Tyr Gln Leu Thr Asn Thr Val His Thr Val Glu Arg Gly Ile

797

100	105	110
Leu Asn Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Gln Gly		
115	120	125
Tyr Lys Gln Cys Asn Pro Arg Pro Lys Asn Leu Asp Val Gly Asn Lys		
130	135	140
Asp Gly Gly Ser Tyr Asp Leu His Arg Gly Gln Leu Trp Ala Trp Met		
145	150	155
Gly Arg Leu Ile Ser Pro Val Ser Leu Gln Thr Ser Thr Gly Lys Ala		
165	170	175

&lt;210&gt; 765

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (301)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 765

Val Xaa Pro Gly Phe Glu Asn Ile Leu Phe Ala His Ser Ser Trp Tyr
1 5 10 15

Thr Tyr Ala Ala Met Leu Arg Ile Tyr Lys His Trp Asp Phe Asn Ile
20 25 30

Ile Asp Lys Asp Thr Ser Ser Ser Arg Leu Ser Phe Ser Ser Tyr Pro
35 40 45

Gly Phe Leu Glu Ser Leu Asp Asp Phe Tyr Ile Leu Ser Ser Gly Leu
50 55 60

Ile Leu Leu Gln Thr Thr Asn Ser Val Phe Asn Lys Thr Leu Leu Lys
65 70 75 80

Gln Val Ile Pro Glu Thr Leu Leu Ser Trp Gln Arg Val Arg Val Ala
---

85

95

Tyr Asn Ser Gly Thr Tyr Asn Asn Gln Tyr Met Val Leu Asp Leu Lys  
115 120 125

Lys Val Lys Leu Asn His Ser Leu Asp Lys Gly Thr Leu Tyr Ile Val  
130 135 140

Glu Gln Ile Pro Thr Tyr Val Glu Tyr Ser Glu Gln Thr Asp Val Leu  
145 150 155 160

Arg Lys Gly Tyr Trp Pro Ser Tyr Asn Val Pro Phe His Glu Lys Ile  
165 170 175

Tyr Asn Trp Ser Gly Tyr Pro Leu Leu Val Gln Lys Leu Gly Leu Asp  
180 185 190

Tyr Ser Tyr Asp Leu Ala Pro Arg Ala Lys Ile Phe Arg Arg Asp Gln  
195 200 205

Gly Lys Val Thr Asp Thr Ala Ser Met Lys Tyr Ile Met Arg Tyr Asn  
210 215 220

Asn Tyr Lys Lys Asp Pro Tyr Ser Arg Gly Asp Pro Cys Asn Thr Ile  
225 230 235 240

Cys Cys Arg Glu Asp Leu Asn Ser Pro Asn Pro Ser Pro Gly Gly Cys  
245 250 255

Tyr Asp Thr Lys Val Ala Asp Ile Tyr Leu Ala Ser Gln Tyr Thr Ser  
260 265 270

Tyr Ala Ile Ser Gly Pro Thr Val Gln Gly Gly Leu Pro Val Phe Arg  
275 280 285

Trp Asp Arg Phe Asn Lys Thr Leu His Gln Gly Met Xaa Glu Val Tyr  
290 295 300

Asn Phe Asp Phe Ile Thr Met Lys Pro Ile Leu Lys Leu Asp Ile Lys  
305 310 315 320

<211> 848



799

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 766

Gln	Xaa	Ala	Tyr	Ile	Ala	Val	Xaa	Arg	Ala	Gly	Gly	Ile	Glu	Thr	Ile
1				5				10					15		

Ala	Asn	Glu	Phe	Ser	Asp	Arg	Cys	Thr	Pro	Ser	Val	Ile	Ser	Phe	Gly
	20					25						30			

Ser	Lys	Asn	Arg	Thr	Ile	Gly	Val	Ala	Ala	Lys	Asn	Gln	Gln	Ile	Thr
	35					40						45			

His	Ala	Asn	Asn	Thr	Val	Ser	Asn	Phe	Lys	Arg	Phe	His	Gly	Arg	Ala
	50					55					60				

Phe	Asn	Asp	Pro	Phe	Ile	Gln	Lys	Glu	Lys	Glu	Asn	Leu	Ser	Tyr	Asp
65					70					75					80

Leu	Val	Pro	Leu	Lys	Asn	Gly	Gly	Val	Gly	Ile	Lys	Val	Met	Tyr	Met
			85						90					95	

Gly	Glu	Glu	His	Leu	Phe	Ser	Val	Glu	Gln	Ile	Thr	Ala	Met	Leu	Leu
			100					105					110		

Thr	Lys	Leu	Lys	Glu	Thr	Ala	Glu	Asn	Ser	Leu	Lys	Lys	Pro	Val	Thr
	115						120					125			

Asp	Cys	Val	Ile	Ser	Val	Pro	Ser	Phe	Phe	Thr	Asp	Ala	Glu	Arg	Arg
	130					135					140				

Ser	Val	Leu	Asp	Ala	Ala	Gln	Ile	Val	Gly	Leu	Asn	Cys	Leu	Arg	Leu
145					150					155					160

Met	Asn	Asp	Met	Thr	Ala	Val	Ala	Leu	Asn	Tyr	Gly	Ile	Tyr	Lys	Gln
			165						170					175	

Asp	Leu	Pro	Ser	Leu	Asp	Glu	Lys	Pro	Arg	Ile	Val	Val	Phe	Val	Asp
		180						185					190		

Met	Gly	His	Ser	Ala	Phe	Gln	Val	Ser	Ala	Cys	Ala	Phe	Asn	Lys	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

800

195	200	205
Lys Leu Lys Val Leu Gly Thr Ala Phe Asp Pro Phe Leu Gly Gly Lys		
210	215	220
Asn Phe Asp Glu Lys Leu Val Glu His Phe Cys Ala Glu Phe Lys Thr		
225	230	235
Lys Tyr Lys Leu Asp Ala Lys Ser Lys Ile Arg Ala Leu Leu Arg Leu		
	245	250
		255
Tyr Gln Glu Cys Glu Lys Leu Lys Lys Leu Met Ser Ser Asn Ser Thr		
	260	265
		270
Asp Leu Pro Leu Asn Ile Glu Cys Phe Met Asn Asp Lys Asp Val Ser		
	275	280
		285
Gly Lys Met Asn Arg Ser Gln Phe Glu Glu Leu Cys Ala Glu Leu Leu		
	290	295
		300
Gln Lys Ile Glu Val Pro Leu Tyr Ser Leu Leu Glu Gln Thr His Leu		
305	310	315
		320
Lys Val Glu Asp Val Ser Ala Val Glu Ile Val Gly Gly Ala Thr Arg		
	325	330
		335
Ile Pro Ala Val Lys Glu Arg Ile Ala Lys Phe Phe Gly Lys Asp Ile		
	340	345
		350
Ser Thr Thr Leu Asn Ala Asp Glu Ala Val Ala Arg Gly Cys Ala Leu		
	355	360
		365
Gln Cys Ala Ile Leu Ser Pro Ala Phe Lys Val Arg Glu Phe Ser Val		
	370	375
		380
Thr Asp Ala Val Pro Phe Pro Ile Ser Leu Ile Trp Asn His Asp Ser		
385	390	395
		400
Glu Asp Thr Glu Gly Val His Glu Val Phe Ser Arg Asn His Ala Ala		
	405	410
		415
Pro Phe Ser Lys Val Leu Thr Phe Leu Arg Arg Gly Pro Phe Glu Leu		
	420	425
		430
Glu Ala Phe Tyr Ser Asp Pro Gln Gly Val Pro Tyr Pro Glu Ala Lys		
	435	440
		445
Ile Gly Arg Phe Val Val Gln Asn Val Ser Ala Gln Lys Asp Gly Glu		
450	455	460
Lys Ser Arg Val Lys Val Lys Val Arg Val Asn Thr His Gly Ile Phe		

801

465		470		475		480
Thr Ile Ser Thr	Ala Ser Met Val	Glu Lys Val Pro	Thr Glu Glu Asn			
	485	490	495			
Glu Met Ser Ser	Glu Ala Asp Met	Glu Cys Leu Asn	Gln Arg Pro Pro			
	500	505	510			
Glu Asn Pro Asp	Thr Asp Lys Asn	Val Gln Gln Asp	Asn Ser Glu Ala			
	515	520	525			
Gly Thr Gln Pro	Gln Val Gln Thr	Asp Ala Gln Gln	Thr Ser Gln Ser			
	530	535	540			
Pro Pro Ser Pro	Glu Leu Thr Ser	Glu Glu Asn Lys	Ile Pro Asp Ala			
	545	550	555			560
Asp Lys Ala Asn	Glu Lys Lys Val	Asp Gln Pro Pro	Glu Ala Lys Lys			
	565	570	575			
Pro Lys Ile Lys	Val Val Asn Val	Glu Leu Pro Ile	Glu Ala Asn Leu			
	580	585	590			
Val Trp Gln Leu	Gly Lys Asp Leu	Leu Asn Met Tyr	Ile Glu Thr Glu			
	595	600	605			
Gly Lys Met Ile	Met Gln Asp Lys	Leu Glu Lys Glu	Arg Asn Asp Ala			
	610	615	620			
Lys Asn Ala Val	Glu Glu Tyr Val	Tyr Glu Phe Arg	Asp Lys Leu Cys			
	625	630	635			640
Gly Pro Tyr Glu	Lys Phe Ile Cys	Glu Gln Asp His	Gln Asn Phe Leu			
	645	650	655			
Arg Leu Leu Thr	Glu Thr Glu Asp	Trp Leu Tyr Glu	Glu Gly Glu Asp			
	660	665	670			
Gln Ala Lys Gln	Ala Tyr Val Asp	Lys Leu Glu Glu	Leu Met Lys Ile			
	675	680	685			
Gly Thr Pro Val	Lys Val Arg Phe	Gln Glu Ala Glu	Glu Arg Pro Lys			
	690	695	700			
Met Phe Glu Glu	Leu Gly Gln Arg	Leu Gln His Tyr	Ala Lys Ile Ala			
	705	710	715			720
Ala Asp Phe Arg	Asn Lys Asp Glu	Lys Tyr Asn His	Ile Asp Glu Ser			
	725	730	735			
Glu Met Lys Lys	Val Glu Lys Ser	Val Asn Glu Val	Met Glu Trp Met			

802

740	745	750
Asn Asn Val Met Asn Ala Gln Ala Lys Lys Ser Leu Asp Gln Asp Pro		
755	760	765
Val Val Arg Ala Gln Glu Ile Lys Thr Lys Ile Lys Glu Leu Asn Asn		
770	775	780
Thr Cys Glu Pro Val Val Thr Gln Pro Lys Pro Lys Ile Glu Ser Pro		
785	790	795
Lys Leu Glu Arg Thr Pro Asn Gly Pro Asn Ile Asp Lys Lys Glu Glu		
805	810	815
Asp Leu Glu Asp Lys Asn Asn Phe Gly Ala Glu Pro Pro His Gln Asn		
820	825	830
Gly Glu Cys Tyr Pro Asn Glu Lys Asn Ser Val Asn Met Asp Leu Asp		
835	840	845

&lt;210&gt; 767

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 767

Ser Ser Cys Cys Pro Leu His Phe Ser Ala Ser Tyr Thr Thr Ala Asn
1 5 10 15
Ala Glu Ser Asp Asn Glu Arg Asp Ser Asp Lys Glu Ser Glu Asp Gly
20 25 30
Glu Asp Glu Val Ser Cys Glu Thr Val Lys Met Gly Arg Lys Asp Ser
35 40 45
Leu Asp Leu Glu Glu Glu Ala Ala Ser Gly Ala Ser Ser Ala Leu Glu
50 55 60
Ala Gly Gly Ser Ser Gly Leu Glu Asp Val Leu Pro Leu Leu Gln Gln
65 70 75 80
Ala Asp Glu Leu His Arg Gly Asp Glu Gln Gly Lys Arg Glu Gly Phe
85 90 95
Gln Leu Leu Leu Asn Asn Lys Leu Val Tyr Gly Ser Arg Gln Asp Phe
100 105 110

803

Leu Trp Arg Leu Ala Arg Ala Tyr Ser Asp Met Cys Glu Leu Thr Glu  
 115 120 125

Glu Val Ser Glu Lys Lys Ser Tyr Ala Leu Asp Gly Lys Glu Glu Ala  
 130 135 140

Glu Ala Ala Leu Glu Lys Gly Asp Glu Ser Ala Asp Cys His Leu Trp  
 145 150 155 160

Tyr Ala Val Leu Cys Gly Gln Leu Ala Glu His Glu Ser Ile Gln Arg  
 165 170 175

Arg Ile Gln Ser Gly Phe Ser Phe Lys Glu His Val Asp Lys Ala Ile  
 180 185 190

Ala Leu Gln Pro Glu Asn Pro Met Ala His Phe Leu Leu Gly Arg Trp  
 195 200 205

Cys Tyr Gln Val Ser His Leu Ser Trp Leu Glu Lys Lys Thr Ala Thr  
 210 215 220

Ala Leu Leu Glu Ser Pro Leu Ser Ala Thr Val Glu Asp Ala Leu Gln  
 225 230 235 240

Ser Phe Leu Lys Ala Glu Glu Leu Gln Pro Gly Phe Ser Lys Ala Gly  
 245 250 255

Arg Val Tyr Ile Ser Lys Cys Tyr Arg Glu Leu Gly Lys Asn Ser Glu  
 260 265 270

Ala Arg Trp Trp Met Lys Leu Ala Leu Glu Leu Pro Asp Val Thr Lys  
 275 280 285

Glu Asp Leu Ala Ile Gln Lys Asp Leu Glu Glu Leu Glu Val Ile Leu  
 290 295 300

Arg Asp  
 305

<210> 768

<211> 404

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

804

&lt;400&gt; 768

Leu Ser Leu Arg Thr Xaa Glu Thr Pro Ala Pro Pro Arg Cys Glu Ala  
 1 5 10 15

Ala Ser Gln Gly Arg Val Gly Trp Arg Ala Asp Ala Ala Ala Glu Glu  
 20 25 30

Ala Val Arg Ser Val Trp Asn Arg Thr Arg Asp Arg Gly Thr Met Ala  
 35 40 45

Pro Gln Asn Leu Ser Thr Phe Cys Leu Leu Leu Leu Tyr Leu Ile Gly  
 50 55 60

Ala Val Ile Ala Gly Arg Asp Phe Tyr Lys Ile Leu Gly Val Pro Arg  
 65 70 75 80

Ser Ala Ser Ile Lys Asp Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu  
 85 90 95

Gln Leu His Pro Asp Arg Asn Pro Asp Asp Pro Gln Ala Gln Glu Lys  
 100 105 110

Phe Gln Asp Leu Gly Ala Ala Tyr Glu Val Leu Ser Asp Ser Glu Lys  
 115 120 125

Arg Lys Gln Tyr Asp Thr Tyr Gly Glu Glu Gly Leu Lys Asp Gly His  
 130 135 140

Gln Ser Ser His Gly Asp Ile Phe Ser His Phe Phe Gly Asp Phe Gly  
 145 150 155 160

Phe Met Phe Gly Gly Thr Pro Arg Gln Gln Asp Arg Asn Ile Pro Arg  
 165 170 175

Gly Ser Asp Ile Ile Val Asp Leu Glu Val Thr Leu Glu Glu Val Tyr  
 180 185 190

Ala Gly Asn Phe Val Glu Val Val Arg Asn Lys Pro Val Ala Arg Gln  
 195 200 205

Ala Pro Gly Lys Arg Lys Cys Asn Cys Arg Gln Glu Met Arg Thr Thr  
 210 215 220

Gln Leu Gly Pro Gly Arg Phe Gln Met Thr Gln Glu Val Val Cys Asp  
 225 230 235 240

Glu Cys Pro Asn Val Lys Leu Val Asn Glu Glu Arg Thr Leu Glu Val  
 245 250 255

Glu Ile Glu Pro Gly Val Arg Asp Gly Met Glu Tyr Pro Phe Ile Gly

805

260	265	270
Glu Gly Glu Pro His Val Asp	Gly Glu Pro Gly Asp	Leu Arg Phe Arg
275	280	285
Ile Lys Val Val Lys His Pro	Ile Phe Glu Arg Arg	Gly Asp Asp Leu
290	295	300
Tyr Thr Asn Val Thr Ile Ser	Leu Val Glu Ser Leu Val	Gly Phe Glu
305	310	315
Met Asp Ile Thr His Leu Asp	Gly His Lys Val His Ile	Ser Arg Asp
325	330	335
Lys Ile Thr Arg Pro Gly Ala	Lys Leu Trp Lys Lys	Gly Glu Gly Leu
340	345	350
Pro Asn Phe Asp Asn Asn Asn	Ile Lys Gly Ser Leu Ile	Ile Thr Phe
355	360	365
Asp Val Asp Phe Pro Lys Glu	Gln Leu Thr Glu Glu Ala	Arg Glu Gly
370	375	380
Ile Lys Gln Leu Leu Lys Gln	Gly Ser Val Gln Lys Val	Tyr Asn Gly
385	390	395
400		

Leu Gln Gly Tyr

&lt;210&gt; 769

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 769

Ile	Glu	Phe	Val	Phe	Leu	Glu	Pro	Trp	Val	Phe	Thr	Cys	Leu	Val	Phe
1					5				10				15		

Phe Cys Phe Gly Leu Ser Pro Ser Ile Lys Glu Val Tyr Ser Ser Lys

20                      25                      30

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<210> 770
<211> 172
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 770
Xaa Arg Gly Cys Val Val Glu Gly Asn Pro Val Leu Ala Gly Ser Cys
 1             5             10             15

Asp Ser Thr Cys Ser His Leu Val Val Pro Ile Leu Leu Leu Val Ser
      20             25             30

Leu Gly Ser Ala Leu Ala Cys Leu Thr His Thr Pro Ser Phe Met Leu
      35             40             45

Ile Leu Arg Gly Val Lys Lys Glu Asp Lys Thr Leu Ala Val Gly Ile
      50             55             60

Gln Phe Met Phe Leu Arg Ile Leu Ala Trp Met Pro Ser Pro Val Ile
      65             70             75             80

His Gly Ser Ala Ile Asp Thr Thr Cys Val His Trp Ala Leu Ser Cys
      85             90             95

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807

Gly Arg Arg Ala Val Cys Arg Tyr Tyr Asn Asn Asp Leu Leu Arg Asn  
                   100                                  105                                  110  
 Arg Phe Ile Gly Leu Gln Phe Phe Phe Lys Thr Gly Ser Val Ile Cys  
                   115                                  120                                  125  
 Phe Ala Leu Val Leu Ala Val Leu Arg Gln Gln Asp Lys Glu Ala Arg  
                   130                                  135                                  140  
 Thr Lys Glu Ser Arg Ser Ser Pro Ala Val Glu Gln Gln Leu Leu Val  
 145                                  150                                  155                                  160  
 Ser Gly Pro Gly Lys Lys Pro Glu Asp Ser Arg Val  
                                   165                                  170

&lt;210&gt; 771

&lt;211&gt; 465

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (104)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 771

Arg Arg Thr Gln Tyr Leu Gly Ser Pro Gly Pro Asp Arg Gly Arg Lys  
   1                                  5                                  10                                  15

Gln Arg Ala Xaa Cys Gly Ala Asp Xaa Gly Asp Glu Met Thr Thr Ser  
                   20                                  25                                  30

Thr Leu Gln Lys Ala Ile Asp Leu Val Thr Lys Ala Thr Glu Glu Asp  
                   35                                  40                                  45

Lys Ala Lys Asn Tyr Glu Glu Ala Leu Arg Leu Tyr Gln His Ala Val  
                   50                                  55                                  60

Glu Tyr Phe Leu His Ala Ile Lys Tyr Glu Ala His Ser Asp Lys Ala

808

65		70		75		80
Lys Glu Ser Ile Arg Ala Lys Cys Val Gln Tyr Leu Asp Arg Ala Glu						
		85		90		95
Lys Leu Lys Asp Tyr Leu Arg Xaa Lys Glu Lys His Gly Lys Lys Pro						
		100		105		110
Val Lys Glu Asn Gln Ser Glu Gly Lys Gly Ser Asp Ser Asp Ser Glu						
		115		120		125
Gly Asp Asn Pro Glu Lys Lys Lys Leu Gln Glu Gln Leu Met Gly Ala						
		130		135		140
Val Val Met Glu Lys Pro Asn Ile Arg Trp Asn Asp Val Ala Gly Leu						
		145		150		155
Glu Gly Ala Lys Glu Ala Leu Lys Glu Ala Val Ile Leu Pro Ile Lys						
		165		170		175
Phe Pro His Leu Phe Thr Gly Lys Arg Thr Pro Trp Arg Gly Ile Leu						
		180		185		190
Leu Phe Gly Pro Pro Gly Thr Gly Lys Ser Tyr Leu Ala Lys Ala Val						
		195		200		205
Ala Thr Glu Ala Asn Asn Ser Thr Phe Phe Ser Val Ser Ser Ser Asp						
		210		215		220
Leu Met Ser Lys Trp Leu Gly Glu Ser Glu Lys Leu Val Lys Asn Leu						
		225		230		235
Phe Glu Leu Ala Arg Gln His Lys Pro Ser Ile Ile Phe Ile Asp Glu						
		245		250		255
Val Asp Ser Leu Cys Gly Ser Arg Asn Glu Asn Glu Ser Glu Ala Ala						
		260		265		270
Arg Arg Ile Lys Thr Glu Phe Leu Val Gln Met Gln Gly Val Gly Asn						
		275		280		285
Asn Asn Asp Gly Thr Leu Val Leu Gly Ala Thr Asn Ile Pro Trp Val						
		290		295		300
Leu Asp Ser Ala Ile Arg Arg Arg Phe Glu Lys Arg Ile Tyr Ile Pro						
		305		310		315
Leu Pro Glu Glu Ala Ala Arg Ala Gln Met Phe Arg Leu His Leu Gly						
		325		330		335
Ser Thr Pro His Asn Leu Thr Asp Ala Asn Ile His Glu Leu Ala Arg						

809

	340		345		350										
Lys	Thr	Glu	Gly	Tyr	Ser	Gly	Ala	Asp	Ile	Ser	Ile	Ile	Val	Arg	Asp
	355						360					365			
Ser	Leu	Met	Gln	Pro	Val	Arg	Lys	Val	Gln	Ser	Ala	Thr	His	Phe	Lys
	370					375					380				
Lys	Val	Cys	Gly	Pro	Ser	Arg	Thr	Asn	Pro	Ser	Met	Met	Ile	Asp	Asp
385					390					395					400
Leu	Leu	Thr	Pro	Cys	Ser	Pro	Gly	Asp	Pro	Gly	Ala	Met	Glu	Met	Thr
			405						410					415	
Trp	Met	Asp	Val	Pro	Gly	Asp	Lys	Leu	Leu	Glu	Pro	Val	Val	Cys	Met
			420					425					430		
Ser	Asp	Met	Leu	Arg	Ser	Leu	Ala	Thr	Thr	Arg	Pro	Thr	Val	Asn	Ala
	435						440					445			
Asp	Asp	Leu	Leu	Lys	Val	Lys	Lys	Phe	Ser	Glu	Asp	Phe	Gly	Gln	Glu
450						455					460				
Ser															
465															

&lt;210&gt; 772

&lt;211&gt; 467

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (151)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (160)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (445)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 772

Leu Gly Pro Ala Gly Leu Arg Arg Arg Thr Lys Arg Arg Lys Arg Gly

1

5

10

15

810

Asp	Asn	Ser	Thr	Asp	Thr	Thr	Gln	Gly	Asp	Pro	Leu	Ser	Ile	His	His	20	25	30	
Tyr	Phe	His	Gly	Tyr	Leu	Ala	Gly	Phe	Ser	Val	Arg	Ser	Gly	Arg	Leu	35	40	45	
Glu	Ser	Arg	Glu	Val	Ile	Glu	Cys	Leu	Tyr	Ala	Cys	Arg	Glu	Gly	Leu	50	55	60	
Asp	Tyr	Arg	Asp	Phe	Glu	Ser	Leu	Gly	Lys	Gly	Met	Lys	Val	His	Val	65	70	75	80
Asn	Pro	Ser	Gln	Ser	Leu	Leu	Thr	Leu	Glu	Gly	Asp	Asp	Val	Glu	Thr	85	90	95	
Phe	Asn	His	Ala	Leu	Gln	His	Val	Ala	Tyr	Met	Asn	Thr	Leu	Arg	Phe	100	105	110	
Ala	Thr	Pro	Gly	Val	Arg	Pro	Leu	Arg	Leu	Thr	Thr	Ala	Val	Lys	Cys	115	120	125	
Phe	Ser	Glu	Glu	Ser	Cys	Val	Ser	Ile	Pro	Glu	Val	Glu	Gly	Tyr	Val	130	135	140	
Val	Val	Leu	Gln	Pro	Asp	Xaa	Pro	Gln	Ile	Leu	Leu	Ser	Gly	Thr	Xaa	145	150	155	160
His	Phe	Ala	Arg	Pro	Ala	Val	Asp	Phe	Glu	Gly	Thr	Asn	Gly	Val	Pro	165	170	175	
Leu	Phe	Pro	Asp	Leu	Gln	Ile	Thr	Cys	Ser	Ile	Ser	His	Gln	Val	Glu	180	185	190	
Ala	Lys	Lys	Asp	Glu	Ser	Trp	Gln	Gly	Thr	Val	Thr	Asp	Thr	Arg	Met	195	200	205	
Ser	Asp	Glu	Ile	Val	His	Asn	Leu	Asp	Gly	Cys	Glu	Ile	Ser	Leu	Val	210	215	220	
Gly	Asp	Asp	Leu	Asp	Pro	Glu	Arg	Glu	Ser	Leu	Leu	Leu	Asp	Thr	Thr	225	230	235	240
Ser	Leu	Gln	Gln	Arg	Gly	Leu	Glu	Leu	Thr	Asn	Thr	Ser	Ala	Tyr	Leu	245	250	255	
Thr	Ile	Ala	Gly	Val	Glu	Ser	Ile	Thr	Val	Tyr	Glu	Glu	Ile	Leu	Arg	260	265	270	
Gln	Ala	Arg	Tyr	Arg	Leu	Arg	His	Gly	Ala	Ala	Leu	Tyr	Thr	Arg	Lys	275	280	285	

811

Phe Arg Leu Ser Cys Ser Glu Met Asn Gly Arg Tyr Ser Ser Asn Glu  
 290 295 300

Phe Ile Val Glu Val Asn Val Leu His Ser Met Asn Arg Val Ala His  
 305 310 315 320

Pro Ser His Val Leu Ser Ser Gln Gln Phe Leu His Arg Gly His Gln  
 325 330 335

Pro Pro Pro Glu Met Ala Gly His Ser Leu Ala Ser Ser His Arg Asn  
 340 345 350

Ser Met Ile Pro Ser Ala Ala Thr Leu Ile Ile Val Val Cys Val Gly  
 355 360 365

Phe Leu Val Leu Met Val Val Leu Gly Leu Val Arg Ile His Ser Leu  
 370 375 380

His Arg Arg Val Ser Gly Ala Gly Gly Pro Pro Gly Ala Ser Ser Asp  
 385 390 395 400

Pro Lys Asp Pro Asp Leu Phe Trp Asp Asp Ser Ala Leu Thr Ile Ile  
 405 410 415

Val Asn Pro Met Glu Ser Tyr Gln Asn Arg Gln Ser Cys Val Thr Gly  
 420 425 430

Ala Val Gly Gly Gln Gln Glu Asp Glu Asp Ser Ser Xaa Ser Glu Val  
 435 440 445

Ala Asp Ser Pro Ser Ser Asp Glu Arg Arg Ile Ile Glu Thr Pro Pro  
 450 455 460

His Arg Tyr  
 465

<210> 773

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

812

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (71)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 773

Phe	Phe	Lys	Ser	Ile	Val	Asn	Ile	Arg	Ile	Ile	Xaa	Lys	Ser	Asn	Phe
1					5				10					15	

Lys	Leu	Gln	His	Ile	Ala	Ser	Lys	Gln	Tyr	Arg	Asp	Phe	Xaa	Ile	Pro
			20					25					30		

Tyr	Lys	Xaa	Xaa	Trp	Leu	Lys	Xaa	Xaa	Ile	His	Ile	Lys	Leu	Ile	Leu
		35					40					45			

Phe	Phe	Ala	Cys	Leu	Phe	Cys	Val	Leu	Val	Ala	Ser	Leu	Lys	Phe	Asp
		50				55						60			

Leu	Xaa	Leu	Leu	Phe	Val	Xaa	Gln	Ile	His
65						70			

813

&lt;210&gt; 774

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 774

Gly Ala Ser Trp Arg Ala Arg Thr Arg Gly Ser Arg Asp Asp Pro Ser  
 1 5 10 15

Arg Ala Ala Ala Ala Val Pro Ala Ala Ala Ala Ala Ala Ala Val  
 20 25 30

Ser Trp Ala Ser Arg Gly Glu Ala Ala Pro Asp Gln Asp Glu Ile Gln  
 35 40 45

Arg Leu Pro Gly Leu Ala Lys Gln Pro Ser Phe Arg Gln Tyr Ser Gly  
 50 55 60

Tyr Leu Lys Gly Ser Gly Ser Lys His Leu His Tyr Trp Phe Val Glu  
 65 70 75 80

Ser Gln Lys Asp Pro Glu Asn Ser Pro Val Val Leu Trp Leu Asn Gly  
 85 90 95

Gly Pro Gly Cys Ser Ser Leu Asp Gly Leu Leu Thr Glu His Gly Pro  
 100 105 110

Phe Leu Val Gln Pro Asp Gly Val Thr Leu Glu Tyr Asn Pro Tyr Ser  
 115 120 125

Trp Asn Leu Ile Ala Asn Val Leu Tyr Leu Glu Ser Pro Ala Gly Val  
 130 135 140

Gly Phe Ser Tyr Ser Asp Asp Lys Phe Tyr Ala Thr Asn Asp Thr Glu  
 145 150 155 160

Val Ala Gln Ser Asn Phe Glu Ala Leu Gln Asp Phe Phe Arg Leu Phe  
 165 170 175

Pro Glu Tyr Lys Asn Asn Lys Leu Phe Leu Thr Gly Glu Ser Tyr Ala  
 180 185 190

Gly Ile Tyr Ile Pro Thr Leu Ala Val Leu Val Met Gln Asp Pro Ser  
 195 200 205

Met Asn Leu Gln Gly Leu Ala Val Gly Asn Gly Leu Ser Ser Tyr Glu  
 210 215 220

Gln Asn Asp Asn Ser Leu Val Tyr Phe Ala Tyr Tyr His Gly Leu Leu  
 225 230 235 240

814

Gly Asn Arg Leu Trp Ser Ser Leu Gln Thr His Cys Cys Ser Gln Asn  
 245 250 255  
 Lys Cys Asn Phe Tyr Asp Asn Lys Asp Leu Glu Cys Val Thr Asn Leu  
 260 265 270  
 Gln Glu Val Ala Arg Ile Val Gly Asn Ser Gly Leu Asn Ile Tyr Asn  
 275 280 285  
 Leu Tyr Ala Pro Cys Ala Gly Gly Val Pro Ser His Phe Arg Tyr Glu  
 290 295 300  
 Lys Asp Thr Val Val Val Gln Asp Leu Gly Asn Ile Phe Thr Arg Leu  
 305 310 315 320  
 Pro Leu Lys Arg Met Trp His Gln Ala Leu Leu Arg Ser Gly Asp Lys  
 325 330 335  
 Val Arg Met Asp Pro Pro Cys Thr Asn Thr Thr Ala Ala Ser Thr Tyr  
 340 345 350  
 Leu Asn Asn Pro Tyr Val Arg Lys Ala Leu Asn Ile Pro Glu Gln Leu  
 355 360 365  
 Pro Gln Trp Asp Met Cys Asn Phe Leu Val Asn Leu Gln Tyr Arg Arg  
 370 375 380  
 Leu Tyr Arg Ser Met Asn Ser Gln Tyr Leu Lys Leu Leu Ser Ser Gln  
 385 390 395 400  
 Lys Tyr Gln Ile Leu Leu Tyr Asn Gly Asp Val Asp Met Ala Cys Asn  
 405 410 415  
 Phe Met Gly Asp Glu Trp Phe Val Asp Ser Leu Asn Gln Lys Met Glu  
 420 425 430  
 Val Gln Arg Arg Pro Trp Leu Val Lys Tyr Gly Asp Ser Gly Glu Gln  
 435 440 445  
 Ile Ala Gly Phe Val Lys Glu Phe Ser His Ile Ala Phe Leu Thr Ile  
 450 455 460  
 Lys Gly Ala Gly His Met Val Pro Thr Asp Lys Pro Leu Ala Ala Phe  
 465 470 475 480  
 Thr Met Phe Ser Arg Phe Leu Asn Lys Gln Pro Tyr  
 485 490

&lt;210&gt; 775



815

&lt;211&gt; 464

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 775

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Pro Val Gly Pro Gly Gly Pro Gln Arg Arg Ala Arg Ala Pro Gln Asp
 1             5             10             15

Ala Arg Thr Cys Ser Gln Ala Gly Pro Ala Ser His Ala Glu Ser Tyr
          20             25             30

Asn Pro Pro Pro Glu Tyr Leu Leu Ser Glu Glu Glu Arg Leu Ala Trp
      35             40             45

Glu Gln Gln Glu Pro Gly Glu Arg Lys Leu Ser Phe Leu Pro Arg Lys
 50             55             60

Phe Pro Ser Leu Arg Ala Val Pro Ala Tyr Gly Arg Phe Ile Gln Glu
 65             70             75             80

Arg Phe Glu Arg Cys Leu Asp Leu Tyr Leu Cys Pro Arg Gln Arg Lys
          85             90             95

Met Arg Val Asn Val Asp Pro Glu Asp Leu Ile Pro Lys Leu Pro Arg
      100             105             110

Pro Arg Asp Leu Gln Pro Phe Pro Thr Cys Gln Ala Leu Val Tyr Arg
      115             120             125

Gly His Ser Asp Leu Val Arg Cys Leu Ser Val Ser Pro Gly Gly Gln
 130             135             140

Trp Leu Val Ser Gly Ser Asp Asp Gly Ser Leu Arg Leu Trp Glu Val
 145             150             155             160

Ala Thr Ala Arg Cys Val Arg Thr Val Pro Val Gly Gly Val Val Lys
          165             170             175

Ser Val Ala Trp Asn Pro Ser Pro Ala Val Cys Leu Val Ala Ala Ala
      180             185             190

Val Glu Asp Ser Val Leu Leu Leu Asn Pro Ala Leu Gly Asp Arg Leu
      195             200             205

Val Ala Gly Ser Thr Asp Gln Leu Leu Ser Ala Phe Val Pro Pro Glu
      210             215             220

Glu Pro Pro Leu Gln Pro Ala Arg Trp Leu Glu Ala Ser Glu Glu Glu
 225             230             235             240

Arg Gln Val Gly Leu Arg Leu Arg Ile Cys His Gly Lys Pro Val Thr

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816

	245		250		255
Gln Val Thr Trp His Gly Arg Gly Asp Tyr Leu Ala Val Val Leu Ala	260		265		270
Thr Gln Gly His Thr Gln Val Leu Ile His Gln Leu Ser Arg Arg Arg	275		280		285
Ser Gln Ser Pro Phe Arg Arg Ser His Gly Gln Val Gln Arg Val Ala	290		295		300
Phe His Pro Ala Arg Pro Phe Leu Leu Val Ala Ser Gln Arg Ser Val	305		310		315
Arg Leu Tyr His Leu Leu Arg Gln Glu Leu Thr Lys Lys Leu Met Pro	325		330		335
Asn Cys Lys Trp Val Ser Ser Leu Ala Val His Pro Ala Gly Asp Asn	340		345		350
Val Ile Cys Gly Ser Tyr Asp Ser Lys Leu Val Trp Phe Asp Leu Asp	355		360		365
Leu Ser Thr Lys Pro Tyr Arg Met Leu Arg His His Lys Lys Ala Leu	370		375		380
Arg Ala Val Ala Phe His Pro Arg Tyr Pro Leu Phe Ala Ser Gly Ser	385		390		395
Asp Asp Gly Ser Val Ile Val Cys His Gly Met Val Tyr Asn Asp Leu	405		410		415
Leu Gln Asn Pro Leu Leu Val Pro Val Lys Val Leu Lys Gly His Val	420		425		430
Leu Thr Arg Asp Leu Gly Val Leu Asp Val Ile Phe His Pro Thr Gln	435		440		445
Pro Trp Val Phe Ser Ser Gly Ala Asp Gly Thr Val Arg Leu Phe Thr	450		455		460

&lt;210&gt; 776

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

817

&lt;400&gt; 776

Val	Val	Asn	Ser	Ser	Phe	Pro	Ala	Thr	Arg	Asn	Arg	Thr	Val	Gly	Thr
1				5					10					15	
Ile	Ser	Lys	His	Leu	Asp	Trp	His	Arg	Lys	Glu	Glu	Lys	Glu	His	Leu
			20					25					30		
Lys	Gly	Val	Gln	Asp	Pro	Gln	His	Glu	Arg	Ile	Ile	Thr	Val	Ser	Thr
		35					40					45			
Asn	Gly	Ser	Ile	His	Ser	Pro	Arg	Phe	Pro	His	Thr	Tyr	Pro	Arg	Asn
	50					55					60				
Thr	Val	Leu	Val	Trp	Arg	Leu	Val	Ala	Val	Glu	Glu	Asn	Val	Trp	Ile
65					70					75					80
Gln	Leu	Thr	Phe	Asp	Glu	Arg	Phe	Gly	Leu	Glu	Asp	Pro	Glu	Asp	Asp
				85					90					95	
Ile	Cys	Lys	Tyr	Asp	Phe	Val	Glu	Val	Glu	Glu	Pro	Ser	Asp	Gly	Thr
			100					105					110		
Ile	Leu	Gly	Arg	Trp	Cys	Gly	Ser	Gly	Thr	Val	Pro	Gly	Lys	Gln	Ile
		115					120					125			
Ser	Lys	Gly	Asn	Gln	Ile	Arg	Ile	Arg	Phe	Val	Ser	Asp	Glu	Tyr	Phe
	130					135					140				
Pro	Ser	Glu	Pro	Gly	Phe	Cys	Ile	His	Tyr	Asn	Ile	Val	Met	Pro	Gln
145					150					155					160
Phe	Thr	Glu	Ala	Val	Ser	Pro	Ser	Val	Leu	Pro	Pro	Ser	Ala	Leu	Pro
				165					170					175	
Leu	Asp	Leu	Leu	Asn	Asn	Ala	Ile	Thr	Ala	Phe	Ser	Thr	Leu	Glu	Asp
			180					185					190		
Leu	Ile	Arg	Tyr	Leu	Glu	Pro	Glu	Arg	Trp	Gln	Leu	Asp	Leu	Glu	Asp
		195					200					205			
Leu	Tyr	Arg	Pro	Thr	Trp	Gln	Leu	Leu	Gly	Lys	Ala	Phe	Val	Phe	Gly
	210					215					220				
Arg	Lys	Ser	Arg	Val	Val	Asp	Leu	Asn	Leu	Leu	Thr	Glu	Glu	Val	Arg
225					230					235					240
Leu	Tyr	Ser	Cys	Thr	Pro	Arg	Asn	Phe	Ser	Val	Ser	Ile	Arg	Glu	Glu
				245					250					255	
Leu	Lys	Arg	Thr	Asp	Thr	Ile	Phe	Trp	Pro	Gly	Cys	Leu	Leu	Val	Lys
			260					265						270	

818

Arg Cys Gly Gly Asn Cys Ala Cys Cys Leu His Asn Cys Asn Glu Cys  
           275                                  280                                  285  
 Gln Cys Val Pro Ser Lys Val Thr Lys Lys Tyr His Glu Val Leu Gln  
           290                                  295                                  300  
 Leu Arg Pro Lys Thr Gly Val Arg Gly Leu His Lys Ser Leu Thr Asp  
 305                                  310                                  315                                  320  
 Val Ala Leu Glu His His Glu Glu Cys Asp Cys Val Cys Arg Gly Ser  
                                   325                                  330                                  335  
 Thr Gly Gly

&lt;210&gt; 777

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (155)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 777

Pro Arg Arg Phe Gln Arg Gly Gly Ser Thr Pro Arg Val Gly Val Cys  
   1                                  5                                  10                                  15  
 Ala Arg Pro Gly Pro Xaa Gly His Val Ala Pro Gly Gly Glu Arg Met  
                                   20                                  25                                  30  
 Ser Phe Arg Gly Gly Gly Arg Gly Gly Phe Asn Arg Gly Gly Gly Gly  
                                   35                                  40                                  45  
 Gly Gly Phe Asn Arg Gly Gly Ser Ser Asn His Phe Arg Gly Gly Gly  
                                   50                                  55                                  60  
 Gly Gly Gly Gly Gly Gly Asn Phe Arg Gly Gly Gly Arg Gly Gly Phe  
   65                                  70                                  75                                  80  
 Gly Arg Gly Gly Gly Arg Gly Gly Phe Asn Lys Gly Gln Asp Gln Gly  
                                   85                                  90                                  95

819

Pro Pro Glu Arg Val Val Leu Leu Gly Glu Phe Leu His Pro Cys Glu  
                   100                  105                  110  
 Asp Asp Ile Val Cys Lys Cys Thr Thr Asp Glu Asn Lys Val Pro Tyr  
                   115                  120                  125  
 Phe Asn Ala Pro Val Tyr Leu Glu Asn Lys Glu Gln Ile Gly Lys Val  
                   130                  135                  140  
 Asp Glu Ile Phe Gly Gln Leu Arg Asp Phe Xaa Phe Ser Val Lys Leu  
 145                  150                  155                  160  
 Ser Glu Asn Met Lys Ala Ser Ser Phe Lys Lys Leu Gln Lys Phe Tyr  
                   165                  170                  175  
 Ile Asp Pro Tyr Lys Leu Leu Pro Leu Gln Arg Trp Trp Gln Arg Arg  
                   180                  185                  190  
 Trp Phe

&lt;210&gt; 778

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 778

Ala Gly Ala Val Ile Ile Gly Phe Arg Ser Lys Ile Lys Asn Ala Leu  
   1                  5                  10                  15  
 Ala His Phe Leu Pro Gln Gly Thr Pro Thr Pro Leu Ile Pro Ile Leu  
                   20                  25                  30  
 Val Ile Ile Glu Thr Ile Ser Leu Leu Ile Gln Pro Ile Ala Leu Ala  
                   35                  40                  45  
 Val Arg Leu Thr Ala Asn Ile Thr Ala Gly His Leu Leu Met His Leu  
                   50                  55                  60  
 Ile Gly Ser Ala Thr Leu Ala Ile Ser Thr Ile Asn Leu Pro Ser Thr  
   65                  70                  75                  80  
 Leu Ile Ile Phe Thr Ile Leu Ile Leu Leu Thr Ile Leu Glu Ile Ala  
                   85                  90                  95  
 Val Ala Leu Ile Gln Ala Tyr Val Phe Thr Leu Leu Val Ser Leu Tyr  
                   100                  105                  110

820

Leu His Asp Asn Thr  
115

<210> 779

<211> 429

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (388)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 779

Gly Gly Arg Thr Xaa Ser Ser Pro Glu Lys Asp Pro Xaa Ala Arg Val  
1 5 10 15

Pro Ser Ser Gly Phe Pro Asn Pro Gly Asp Ser Ala Pro Gly Arg Cys  
20 25 30

Tyr Gly Arg His Phe His Ser Val Pro Gly Gly Gln Arg Ser Arg Arg  
35 40 45

Ser Pro Val Ala Gly Gln His Gly Glu Arg Pro Gln Pro Gly Leu Leu  
50 55 60

Gln Tyr Lys Ala Asp Ile Asn Ala Val Asn Glu His Gly Asn Val Pro  
65 70 75 80

Leu His Tyr Ala Cys Phe Trp Gly Gln Asp Gln Val Ala Glu Asp Leu  
85 90 95

Val Ala Asn Gly Ala Leu Val Ser Ile Cys Asn Lys Tyr Gly Glu Met  
100 105 110

Pro Val Asp Lys Ala Lys Ala Pro Leu Arg Glu Leu Leu Arg Glu Arg  
115 120 125

Ala Glu Lys Met Gly Gln Asn Leu Asn Arg Ile Pro Tyr Lys Asp Thr

821

130		135		140	
Phe Trp Lys Gly Thr Thr Arg Thr Arg Pro Arg Asn Gly Thr Leu Asn					
145		150		155	160
Lys His Ser Gly Ile Asp Phe Lys Gln Leu Asn Phe Leu Thr Lys Leu					
	165		170		175
Asn Glu Asn His Ser Gly Glu Leu Trp Lys Gly Arg Trp Gln Gly Asn					
	180		185		190
Asp Ile Val Val Lys Val Leu Lys Val Arg Asp Trp Ser Thr Arg Lys					
	195		200		205
Ser Arg Asp Phe Asn Glu Glu Cys Pro Arg Leu Arg Ile Phe Ser His					
	210		215		220
Pro Asn Val Leu Pro Val Leu Gly Ala Cys Gln Ser Pro Pro Ala Pro					
	225		230		235
His Pro Thr Leu Ile Thr His Trp Met Pro Tyr Gly Ser Leu Tyr Asn					
	245		250		255
Val Leu His Glu Gly Thr Asn Phe Val Val Asp Gln Ser Gln Ala Val					
	260		265		270
Lys Phe Ala Leu Asp Met Ala Arg Gly Met Ala Phe Leu His Thr Leu					
	275		280		285
Glu Pro Leu Ile Pro Arg His Ala Leu Asn Ser Arg Ser Val Met Ile					
	290		295		300
Asp Glu Asp Met Thr Ala Arg Ile Ser Met Ala Asp Val Lys Phe Ser					
	305		310		315
Phe Gln Cys Pro Gly Arg Met Tyr Ala Pro Ala Trp Val Ala Pro Glu					
	325		330		335
Ala Leu Gln Lys Lys Pro Glu Asp Thr Asn Arg Arg Ser Ala Asp Met					
	340		345		350
Trp Ser Phe Ala Val Leu Leu Trp Glu Leu Val Thr Arg Glu Val Pro					
	355		360		365
Phe Ala Asp Leu Ser Asn Met Glu Ile Gly Met Lys Val Ala Leu Glu					
	370		375		380
Gly Leu Arg Xaa Thr Ile Pro Pro Gly Ile Ser Pro His Val Cys Lys					
	385		390		395
Leu Met Lys Ile Cys Met Asn Glu Asp Pro Ala Lys Arg Pro Lys Phe					

822

405 410 415  
 Asp Met Ile Val Pro Ile Leu Glu Lys Met Gln Asp Lys  
 420 425  
  
 <210> 780  
 <211> 793  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 780  
 Gly Ser Leu Ala Ala Arg Pro Arg His Thr Arg Ser Pro Gly Leu Ser  
 1 5 10 15  
 Ala Ser Ala Gly Glu Thr Ala Met Ala Gln Trp Asn Gln Leu Gln Gln  
 20 25 30  
 Leu Asp Thr Arg Tyr Leu Glu Gln Leu His Gln Leu Tyr Ser Asp Ser  
 35 40 45  
 Phe Pro Met Glu Leu Arg Gln Phe Leu Ala Pro Trp Ile Glu Ser Gln  
 50 55 60  
 Asp Trp Ala Tyr Ala Ala Ser Lys Glu Ser His Ala Thr Leu Val Phe  
 65 70 75 80  
 His Asn Leu Leu Gly Glu Ile Asp Gln Gln Tyr Ser Arg Phe Leu Gln  
 85 90 95  
 Glu Ser Asn Val Leu Tyr Gln His Asn Leu Arg Arg Ile Lys Gln Phe  
 100 105 110  
 Leu Gln Ser Arg Tyr Leu Glu Lys Pro Met Glu Ile Ala Arg Ile Val  
 115 120 125  
 Ala Arg Cys Leu Trp Glu Glu Ser Arg Leu Leu Gln Thr Ala Ala Thr  
 130 135 140  
 Ala Ala Gln Gln Gly Gly Gln Ala Asn His Pro Thr Ala Ala Val Val  
 145 150 155 160  
 Thr Glu Lys Gln Gln Met Leu Glu Gln His Leu Gln Asp Val Arg Lys  
 165 170 175  
 Arg Val Gln Asp Leu Glu Gln Lys Met Lys Val Val Glu Asn Leu Gln  
 180 185 190  
 Asp Asp Phe Asp Phe Asn Tyr Lys Thr Leu Lys Ser Gln Gly Asp Met  
 195 200 205



Gln	Asp	Leu	Asn	Gly	Asn	Asn	Gln	Ser	Val	Thr	Arg	Gln	Lys	Met	Gln	210	215	220	
Gln	Leu	Glu	Gln	Met	Leu	Thr	Ala	Leu	Asp	Gln	Met	Arg	Arg	Ser	Ile	225	230	235	240
Val	Ser	Glu	Leu	Ala	Gly	Leu	Leu	Ser	Ala	Met	Glu	Tyr	Val	Gln	Lys	245	250	255	
Thr	Leu	Thr	Asp	Glu	Glu	Leu	Ala	Asp	Trp	Lys	Arg	Arg	Gln	Gln	Ile	260	265	270	
Ala	Cys	Ile	Gly	Gly	Pro	Pro	Asn	Ile	Cys	Leu	Asp	Arg	Leu	Glu	Asn	275	280	285	
Trp	Ile	Thr	Ser	Leu	Ala	Glu	Ser	Gln	Leu	Gln	Thr	Arg	Gln	Gln	Ile	290	295	300	
Lys	Lys	Leu	Glu	Glu	Leu	Gln	Gln	Lys	Val	Ser	Tyr	Lys	Gly	Asp	Pro	305	310	315	320
Ile	Val	Gln	His	Arg	Pro	Met	Leu	Glu	Glu	Arg	Ile	Val	Glu	Leu	Phe	325	330	335	
Arg	Asn	Leu	Met	Lys	Ser	Ala	Phe	Val	Val	Glu	Arg	Gln	Pro	Cys	Met	340	345	350	
Pro	Met	His	Pro	Asp	Arg	Pro	Leu	Val	Ile	Lys	Thr	Gly	Val	Gln	Phe	355	360	365	
Thr	Thr	Lys	Val	Arg	Leu	Leu	Val	Lys	Phe	Pro	Glu	Leu	Asn	Tyr	Gln	370	375	380	
Leu	Lys	Ile	Lys	Val	Cys	Ile	Asp	Lys	Asp	Ser	Gly	Asp	Val	Ala	Ala	385	390	395	400
Leu	Arg	Gly	Ser	Arg	Lys	Phe	Asn	Ile	Leu	Gly	Thr	Asn	Thr	Lys	Val	405	410	415	
Met	Asn	Met	Glu	Glu	Ser	Asn	Asn	Gly	Ser	Leu	Ser	Ala	Glu	Phe	Lys	420	425	430	
His	Leu	Thr	Leu	Arg	Glu	Gln	Arg	Cys	Gly	Asn	Gly	Gly	Arg	Ala	Asn	435	440	445	
Cys	Asp	Ala	Ser	Leu	Ile	Val	Thr	Glu	Glu	Leu	His	Leu	Ile	Thr	Phe	450	455	460	
Glu	Thr	Glu	Val	Tyr	His	Gln	Gly	Leu	Lys	Ile	Asp	Leu	Glu	Thr	His	465	470	475	480

824

Ser	Leu	Pro	Val	Val	Val	Ile	Ser	Asn	Ile	Cys	Gln	Met	Pro	Asn	Ala	485	490	495
Trp	Ala	Ser	Ile	Leu	Trp	Tyr	Asn	Met	Leu	Thr	Asn	Asn	Pro	Lys	Asn	500	505	510
Val	Asn	Phe	Phe	Thr	Lys	Pro	Pro	Ile	Gly	Thr	Trp	Asp	Gln	Val	Ala	515	520	525
Glu	Val	Leu	Ser	Trp	Gln	Phe	Ser	Ser	Thr	Thr	Lys	Arg	Gly	Leu	Ser	530	535	540
Ile	Glu	Gln	Leu	Thr	Thr	Leu	Ala	Glu	Lys	Leu	Leu	Gly	Pro	Gly	Val	545	550	555
Asn	Tyr	Ser	Gly	Cys	Gln	Ile	Thr	Trp	Ala	Lys	Phe	Cys	Lys	Glu	Asn	565	570	575
Met	Ala	Gly	Lys	Gly	Phe	Ser	Phe	Trp	Val	Trp	Leu	Asp	Asn	Ile	Ile	580	585	590
Asp	Leu	Val	Lys	Lys	Tyr	Ile	Leu	Ala	Leu	Trp	Asn	Glu	Gly	Tyr	Ile	595	600	605
Met	Gly	Phe	Ile	Ser	Lys	Glu	Arg	Glu	Arg	Ala	Ile	Leu	Ser	Thr	Lys	610	615	620
Pro	Pro	Gly	Thr	Phe	Leu	Leu	Arg	Phe	Ser	Glu	Ser	Ser	Lys	Glu	Gly	625	630	635
Gly	Val	Thr	Phe	Thr	Trp	Val	Glu	Lys	Asp	Ile	Ser	Gly	Lys	Thr	Gln	645	650	655
Ile	Gln	Ser	Val	Glu	Pro	Tyr	Thr	Lys	Gln	Gln	Leu	Asn	Asn	Met	Ser	660	665	670
Phe	Ala	Glu	Ile	Ile	Met	Gly	Tyr	Lys	Ile	Met	Asp	Ala	Thr	Asn	Ile	675	680	685
Leu	Val	Ser	Pro	Leu	Val	Tyr	Leu	Tyr	Pro	Asp	Ile	Pro	Lys	Glu	Glu	690	695	700
Ala	Phe	Gly	Lys	Tyr	Cys	Arg	Pro	Glu	Ser	Gln	Glu	His	Pro	Glu	Ala	705	710	715
Asp	Pro	Gly	Ser	Ala	Ala	Pro	Tyr	Leu	Lys	Thr	Lys	Phe	Ile	Cys	Val	725	730	735
Thr	Pro	Thr	Thr	Cys	Ser	Asn	Thr	Ile	Asp	Leu	Pro	Met	Ser	Pro	Arg	740	745	750

825

Thr Leu Asp Ser Leu Met Gln Phe Gly Asn Asn Gly Glu Gly Ala Glu  
 755 760 765

Pro Ser Ala Gly Gly Gln Phe Glu Ser Leu Thr Phe Asp Met Glu Leu  
 770 775 780

Thr Ser Glu Cys Ala Thr Ser Pro Met  
 785 790

<210> 781

<211> 338

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (313)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (319)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 781

Val Ser Leu Pro Val Val Pro Ala Ser Phe Ser Phe Pro Pro Cys Pro  
 1 5 10 15

Ala Ala Gly Pro Gly Gln Pro Gly Ser Gly Trp Gly Gly Val Leu Pro  
 20 25 30

Ser Ser Ser Trp Asp Ile Ala Arg Val Arg Ser Thr Pro Ser Gln Pro  
 35 40 45

Leu Leu Trp Ser Pro Val Gly Arg Gly Ala Ala Ile Leu Val Ala Arg  
 50 55 60

Gly Val Ser Arg Ile Arg Arg Val Ser Leu Pro Ser Arg Trp Arg Gly  
 65 70 75 80

Leu Cys Pro Cys Ser Val Thr Ala Ala Leu Gly Lys Arg Ser Ala Pro  
 85 90 95

Lys Thr Asp Val Thr Ile Thr Asn Asp Gly Ala Thr Ile Leu Lys Leu  
 100 105 110

Leu Glu Val Glu His Pro Ala Ala Lys Val Leu Cys Glu Leu Ala Asp  
 115 120 125

826

Leu Gln Asp Lys Glu Val Gly Asp Gly Thr Thr Ser Val Val Ile Ile  
 130 135 140  
 Ala Ala Glu Leu Leu Lys Asn Ala Asp Glu Leu Val Lys Gln Lys Ile  
 145 150 155 160  
 His Pro Thr Ser Val Ile Ser Gly Tyr Arg Leu Ala Cys Lys Glu Ala  
 165 170 175  
 Val Arg Tyr Ile Asn Glu Asn Leu Ile Val Asn Thr Asp Glu Leu Gly  
 180 185 190  
 Arg Asp Cys Leu Ile Asn Ala Ala Lys Thr Ser Met Ser Ser Lys Ile  
 195 200 205  
 Ile Gly Ile Asn Gly Asp Phe Phe Ala Asn Met Val Val Asp Ala Val  
 210 215 220  
 Leu Ala Ile Lys Tyr Thr Asp Ile Arg Gly Gln Pro Arg Tyr Pro Val  
 225 230 235 240  
 Asn Ser Val Asn Ile Leu Lys Ala His Gly Arg Ser Gln Met Glu Ser  
 245 250 255  
 Met Leu Ile Ser Gly Tyr Ala Leu Asn Cys Val Val Gly Ser Gln Gly  
 260 265 270  
 Met Pro Lys Arg Ile Val Asn Ala Lys Ile Ala Cys Leu Asp Phe Ser  
 275 280 285  
 Leu Gln Lys Thr Lys Met Lys Leu Gly Val Gln Val Val Ile Thr Asp  
 290 295 300  
 Pro Glu Lys Leu Asp Gln Ile Arg Xaa Ser Asn Tyr Ser Val Xaa Pro  
 305 310 315 320  
 Gly Pro Ile Trp Lys Val Lys Lys Leu Leu Lys Cys Asn Val Gly Thr  
 325 330 335  
 Gly Arg

&lt;210&gt; 782

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 782

827

Ile Leu His Leu Asn Ala Leu Met Lys Asn Lys Ala Lys Thr Arg Val  
 1 5 10 15  
 Leu Gly His Ser Ser Ala Gln Arg Val Pro Gly Asp Gly Arg Pro Leu  
 20 25 30  
 Ser Pro His Pro Leu Thr Leu Glu Asn Trp Val Phe Ser Gln Tyr Ser  
 35 40 45  
 Ser Asn Ser Phe Leu Lys Ala Val Glu Pro Leu Tyr Ser Lys Val His  
 50 55 60  
 Cys Arg Cys Ser Asn Ser Pro Phe Leu Phe Pro Leu Pro Pro Ala Ser  
 65 70 75 80  
 Phe Ala Asp Ser Gln Leu Val Met Ser Val Ser Ile Lys Asp Ile Met  
 85 90 95  
 Leu Leu Arg Phe  
 100

&lt;210&gt; 783

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 783

Phe Gly Arg Ala Ile Ala Arg Val Thr Gly Asn Pro Val Gln Gly Ala  
 1 5 10 15  
 Pro Pro Ser Trp Thr Ser Pro Arg Lys Ile Leu Arg Glu His Arg Ser  
 20 25 30  
 Ser His Arg Cys His Cys Tyr Cys Arg Tyr Cys Cys Arg Arg Val Cys  
 35 40 45  
 Thr Ser Arg Pro Ala Ser Val Pro Ala Gly Ala Ser Val Asp Arg Pro  
 50 55 60  
 Arg Pro Leu Ser Arg Cys Val Arg Thr Pro Val Pro Gly Pro Asp Ala  
 65 70 75 80  
 Pro Leu Pro Pro Gly Lys Leu Pro Ser His Gln Gln Pro Pro Ser Ala  
 85 90 95  
 Thr Met Ala Thr Ala Pro Tyr Asn Tyr Ser Tyr Ile Phe Lys Tyr Ile  
 100 105 110  
 Ile Ile Gly Asp Met Gly Val Gly Lys Ser Cys Leu Leu His Gln Phe

828

115	120	125
Thr Glu Lys Lys Phe Met Ala Asp Cys Pro His Thr Ile Gly Val Glu		
130	135	140
Phe Gly Thr Arg Ile Ile Glu Val Ser Gly Gln Lys Ile Lys Leu Gln		
145	150	155
Ile Trp Asp Thr Ala Gly Gln Glu Arg Phe Arg Ala Val Thr Arg Ser		
	165	170
Tyr Tyr Arg Gly Ala Ala Gly Ala Leu Met Val Tyr Asp Ile Thr Arg		
	180	185
Arg Ser Thr Tyr Asn His Leu Ser Ser Trp Leu Thr Asp Ala Arg Asn		
	195	200
Leu Thr Asn Pro Asn Thr Val Ile Ile Leu Ile Gly Asn Lys Ala Asp		
	210	215
Leu Glu Ala Gln Arg Asp Val Thr Tyr Glu Glu Ala Lys Gln Phe Ala		
	225	230
Glu Glu Asn Gly Leu Leu Phe Leu Glu Ala Ser Ala Lys Thr Gly Glu		
	245	250
Asn Val Glu Asp Ala Phe Leu Glu Ala Ala Lys Lys Ile Tyr Gln Asn		
	260	265
Ile Gln Asp Gly Ser Leu Asp Leu Asn Ala Ala Glu Ser Gly Val Gln		
	275	280
His Lys Pro Ser Ala Pro Gln Gly Gly Arg Leu Thr Ser Glu Pro Gln		
	290	295
Pro Gln Arg Glu Gly Cys Gly Cys		
305	310	

&lt;210&gt; 784

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

829

&lt;221&gt; SITE

&lt;222&gt; (68)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 784

```

Arg Gly Pro Ala Leu Arg Ala Ala Xaa Thr Ile Lys Trp Arg Val Leu
 1             5             10             15

Gln Pro Ala Pro Ala Ser Glu Arg Glu Met Leu Gly Cys Ser Phe Lys
          20             25             30

Leu Arg Thr Thr His His Ala Tyr Pro Gly Ala Glu Gly Pro Asp His
          35             40             45

His Ser Leu Arg Thr Glu Glu Ala Ala Cys Tyr Ser Trp Cys Cys Ile
 50             55             60

Pro Pro Asp Xaa Leu Leu Phe Pro Gly
 65             70

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&lt;210&gt; 785

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 785

```

Gly Lys Arg Glu Gly Ala Gly Glu Arg Asp Gln Gly Arg Arg Arg Gly
 1             5             10             15

Glu Ser Arg Glu Gly Trp Ser Phe Gly Glu Ser Leu Trp Lys Met Ala
          20             25             30

Pro Val Val Thr Gly Lys Phe Gly Glu Arg Pro Pro Pro Lys Arg Leu
          35             40             45

Thr Arg Glu Ala Met Arg Asn Tyr Leu Lys Glu Arg Gly Asp Gln Thr
          50             55             60

Val Leu Ile Leu His Ala Lys Val Ala Gln Lys Ser Tyr Gly Asn Glu
 65             70             75             80

Lys Arg Phe Phe Cys Pro Pro Pro Cys Val Tyr Leu Met Gly Ser Gly
          85             90             95

Trp Lys Lys Lys Lys Glu Gln Met Glu Arg Asp Gly Cys Ser Glu Gln
          100             105             110

Glu Ser Gln Pro Cys Ala Phe Ile Gly Ile Gly Asn Ser Asp Gln Glu
          115             120             125

```

830

Met	Gln	Gln	Leu	Asn	Leu	Glu	Gly	Lys	Asn	Tyr	Cys	Thr	Ala	Lys	Thr	130	135	140
Leu	Tyr	Ile	Ser	Asp	Ser	Asp	Lys	Arg	Lys	His	Phe	Met	Leu	Ser	Val	145	150	155
Lys	Met	Phe	Tyr	Gly	Asn	Ser	Asp	Asp	Ile	Gly	Val	Phe	Leu	Ser	Lys	165	170	175
Arg	Ile	Lys	Val	Ile	Ser	Lys	Pro	Ser	Lys	Lys	Lys	Gln	Ser	Leu	Lys	180	185	190
Asn	Ala	Asp	Leu	Cys	Ile	Ala	Ser	Gly	Thr	Lys	Val	Ala	Leu	Phe	Asn	195	200	205
Arg	Leu	Arg	Ser	Gln	Thr	Val	Ser	Thr	Arg	Tyr	Leu	His	Val	Glu	Gly	210	215	220
Gly	Asn	Phe	His	Ala	Ser	Ser	Gln	Gln	Trp	Gly	Ala	Phe	Phe	Ile	His	225	230	235
Leu	Leu	Asp	Asp	Asp	Glu	Ser	Glu	Gly	Glu	Glu	Phe	Thr	Val	Arg	Asp	245	250	255
Gly	Tyr	Ile	His	Tyr	Gly	Gln	Thr	Val	Lys	Leu	Val	Cys	Ser	Val	Thr	260	265	270
Gly	Met	Ala	Leu	Pro	Arg	Leu	Ile	Ile	Arg	Lys	Val	Asp	Lys	Gln	Thr	275	280	285
Ala	Leu	Leu	Asp	Ala	Asp	Asp	Pro	Val	Ser	Gln	Leu	His	Lys	Cys	Ala	290	295	300
Phe	Tyr	Leu	Lys	Asp	Thr	Glu	Arg	Met	Tyr	Leu	Cys	Leu	Ser	Gln	Glu	305	310	315
Arg	Ile	Ile	Gln	Phe	Gln	Ala	Thr	Pro	Cys	Pro	Lys	Glu	Pro	Asn	Lys	325	330	335
Glu	Met	Ile	Asn	Asp	Gly	Ala	Ser	Trp	Thr	Ile	Ile	Ser	Thr	Asp	Lys	340	345	350
Ala	Glu	Tyr	Thr	Phe	Tyr	Glu	Gly	Met	Gly	Pro	Val	Leu	Ala	Pro	Val	355	360	365
Thr	Pro	Val	Pro	Val	Val	Glu	Ser	Leu	Gln	Leu	Asn	Gly	Gly	Gly	Asp	370	375	380
Val	Ala	Met	Leu	Glu	Leu	Thr	Gly	Gln	Asn	Phe	Thr	Pro	Asn	Leu	Arg	385	390	395
																		400



831

Val	Trp	Phe	Gly	Asp	Val	Glu	Ala	Glu	Thr	Met	Tyr	Arg	Cys	Gly	Glu
405								410				415			
Ser	Met	Leu	Cys	Val	Val	Pro	Asp	Ile	Ser	Ala	Phe	Arg	Glu	Gly	Trp
420								425				430			
Arg	Trp	Val	Arg	Gln	Pro	Val	Gln	Val	Pro	Val	Thr	Leu	Val	Arg	Asn
435								440				445			
Asp	Gly	Ile	Ile	Tyr	Ser	Thr	Ser	Leu	Thr	Phe	Thr	Tyr	Thr	Pro	Glu
450								455				460			
Pro	Gly	Pro	Arg	Pro	His	Cys	Ser	Ala	Ala	Gly	Ala	Ile	Leu	Arg	Ala
465								470				475			
Asn	Ser	Ser	Gln	Val	Pro	Pro	Asn	Glu	Ser	Asn	Thr	Asn	Ser	Glu	Gly
485								490				495			
Ser	Tyr	Thr	Asn	Ala	Ser	Thr	Asn	Ser	Thr	Ser	Val	Thr	Ser	Ser	Thr
500								505				510			
Ala	Thr	Val	Val	Ser											
515															

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<210> 786
<211> 211
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 786
Pro Cys Ile Leu Gly Val Glu Arg Arg Met Glu Thr Glu Ser Gly Asn
 1               5               10              15
Gln Glu Lys Val Met Glu Glu Glu Ser Thr Glu Lys Lys Lys Glu Val
      20              25              30
Glu Lys Lys Lys Arg Ser Arg Val Lys Gln Val Leu Ala Asp Ile Ala
      35              40              45
```

832

Lys Gln Val Asp Phe Trp Phe Gly Asp Ala Asn Leu His Lys Asp Arg  
 50 55 60

Phe Leu Arg Glu Gln Ile Glu Lys Ser Arg Asp Gly Tyr Val Asp Ile  
 65 70 75 80

Ser Leu Leu Val Ser Phe Asn Lys Met Lys Lys Leu Thr Thr Asp Gly  
 85 90 95

Lys Leu Ile Ala Arg Ala Leu Arg Ser Ser Ala Val Val Glu Leu Asp  
 100 105 110

Leu Glu Gly Thr Arg Ile Arg Arg Lys Xaa Pro Leu Gly Glu Arg Pro  
 115 120 125

Lys Asp Glu Asp Glu Arg Thr Val Tyr Val Glu Leu Leu Pro Lys Asn  
 130 135 140

Val Asn His Ser Trp Ile Glu Arg Val Phe Gly Lys Cys Gly Asn Val  
 145 150 155 160

Val Tyr Ile Ser Ile Pro His Tyr Lys Ser Thr Gly Asp Pro Lys Gly  
 165 170 175

Phe Ala Phe Val Glu Phe Glu Thr Lys Glu Gln Ala Ala Lys Ala Ile  
 180 185 190

Glu Val Ser Pro Asp Pro Xaa Lys Lys Lys Arg Lys Lys Arg Lys Gln  
 195 200 205

Val Leu Lys  
 210

<210> 787

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

833

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 787

His	Ser	Arg	Gly	Val	Ala	Gly	Thr	Ile	Thr	Leu	Phe	Arg	Xaa	Ser	Tyr
1				5					10					15	

Ser	Ser	Ala	Val	Xaa	Xaa	Ser	Gln	Leu	Leu	His	Gln	Met	Arg	Phe	Phe
			20					25					30		

Cys	Ser	Leu	Met	Phe	Phe	Gly	Tyr	Gly	Tyr	Gly	Ile	Cys	Arg	Leu	Gly
		35					40					45			

Gly	Lys	Glu	Leu	Lys	Ile	Thr	Gly	Ala	Gly
	50					55			

&lt;210&gt; 788

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (448)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 788

Asn	Asp	Leu	Thr	Tyr	Asp	Met	Glu	Ile	Leu	Gln	Pro	Leu	Leu	Glu	Gln
1				5					10					15	

Gly	Ala	Ser	Leu	Arg	Gln	Thr	Met	Thr	Tyr	Glu	Gln	Pro	Lys	Glu	Ala
			20					25					30		

Ile	Val	Ile	Arg	Lys	Lys	Ile	Glu	Asn	Leu	Thr	Ser	Ala	Val	Asn	Ser
		35					40					45			

Leu	Asn	Phe	Ile	Ile	Lys	Glu	Leu	Thr	Lys	Arg	His	Asn	Leu	Leu	Arg
	50					55				60					

Asn	Glu	Val	Gln	Gly	Arg	Asp	Asp	Ala	Leu	Glu	Arg	Arg	Ile	Asn	Glu
	65				70					75				80	

Tyr	Ala	Leu	Glu	Met	Glu	Asp	Gly	Leu	Asn	Lys	Thr	Met	Thr	Ile	Ile
				85					90					95	

Asn	Asn	Ala	Ile	Asp	Phe	Ile	Gln	Asp	Asn	Tyr	Ala	Leu	Lys	Glu	Thr
		100						105					110		

834

Leu	Ser	Thr	Ile	Lys	Asp	Asn	Ser	Glu	Ile	His	His	Lys	Cys	Thr	Ser	115	120	125
Asp	Met	Glu	Thr	Ile	Leu	Thr	Phe	Ile	Pro	Gln	Phe	His	Arg	Leu	Asn	130	135	140
Asp	Ser	Ile	Gln	Thr	Leu	Val	Asn	Asp	Asn	Gln	Arg	Tyr	Asn	Phe	Val	145	150	155
Leu	Gln	Val	Ala	Lys	Thr	Leu	Ala	Gly	Ile	Pro	Arg	Asp	Glu	Lys	Leu	165	170	175
Asn	Gln	Ser	Asn	Phe	Gln	Lys	Met	Tyr	Gln	Met	Phe	Asn	Glu	Thr	Thr	180	185	190
Ser	Gln	Val	Arg	Lys	Tyr	Gln	Gln	Asn	Met	Ser	His	Leu	Glu	Glu	Lys	195	200	205
Leu	Leu	Leu	Thr	Thr	Lys	Ile	Ser	Lys	Asn	Phe	Glu	Thr	Arg	Leu	Gln	210	215	220
Asp	Ile	Glu	Ser	Lys	Val	Thr	Gln	Thr	Leu	Ile	Pro	Tyr	Tyr	Ile	Ser	225	230	235
Val	Lys	Lys	Gly	Ser	Val	Val	Thr	Asn	Glu	Arg	Asp	Gln	Ala	Leu	Gln	245	250	255
Leu	Gln	Val	Leu	Asn	Ser	Arg	Phe	Lys	Ala	Leu	Glu	Ala	Lys	Ser	Ile	260	265	270
His	Leu	Ser	Ile	Asn	Phe	Phe	Ser	Leu	Asn	Lys	Thr	Leu	His	Glu	Val	275	280	285
Leu	Thr	Met	Cys	His	Asn	Ala	Ser	Thr	Ser	Val	Ser	Glu	Leu	Asn	Ala	290	295	300
Thr	Ile	Pro	Lys	Trp	Ile	Lys	His	Ser	Leu	Pro	Asp	Ile	Gln	Leu	Leu	305	310	315
Gln	Lys	Gly	Leu	Thr	Glu	Phe	Val	Glu	Pro	Ile	Ile	Gln	Ile	Lys	Thr	325	330	335
Gln	Ala	Ala	Leu	Ser	Asn	Leu	Thr	Cys	Cys	Ile	Asp	Arg	Ser	Leu	Pro	340	345	350
Gly	Ser	Leu	Ala	Asn	Val	Val	Lys	Ser	Gln	Lys	Gln	Val	Lys	Ser	Leu	355	360	365
Pro	Lys	Lys	Ile	Asn	Ala	Leu	Lys	Lys	Pro	Thr	Val	Asn	Leu	Thr	Thr	370	375	380

835

Val Leu Ile Gly Arg Thr Gln Arg Asn Thr Asp Asn Ile Ile Tyr Pro  
 385 390 395 400

Glu Glu Tyr Ser Ser Cys Ser Arg His Pro Cys Gln Asn Gly Gly Thr  
 405 410 415

Cys Ile Asn Gly Arg Thr Ser Phe Thr Cys Ala Cys Arg His Pro Phe  
 420 425 430

Thr Gly Asp Asn Cys Thr Ile Lys Leu Val Glu Glu Asn Ala Leu Xaa  
 435 440 445

Gln Ile Phe Pro Lys Asp Leu Thr Asp Met His Pro Trp Trp His Phe  
 450 455 460

Leu His Leu Ile Arg Met Glu  
 465 470

<210> 789

<211> 328

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (125)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

836

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (152)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (312)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (319)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 789

His	Gly	Val	His	Gly	Gly	Gly	Asp	Arg	Gly	Phe	Ala	Leu	Gly	Gly	His
1				5					10					15	

Glu	Arg	Glu	Pro	Ala	Ser	Gly	Arg	Pro	Gly	Ala	Lys	Xaa	Leu	His	Leu
			20					25					30		

Leu	Leu	Val	Ala	Glu	Pro	His	Gly	Gln	Glu	Asp	His	Ala	Gly	Gln	Gly
		35					40					45			

Glu	Asp	Pro	Arg	Glu	Val	Arg	Ala	Arg	Val	Gly	Ala	Ala	Ala	Ala	Arg
	50					55					60				

Ala	Xaa	Asp	Glu	Ile	Ile	Asp	Arg	Cys	Leu	Val	Gly	Pro	Arg	Ala	Pro
65					70					75					80

Ala	Pro	Arg	Asp	Pro	Gly	Asp	Ser	Glu	Glu	Leu	Thr	Arg	Phe	Pro	Gly
			85						90					95	

Leu	Arg	Gly	Pro	Thr	Gly	Gln	Lys	Val	Val	Arg	Phe	Gly	Asp	Glu	Asp
		100						105					110		

Leu	Thr	Trp	Gln	Asp	Glu	His	Ser	Ala	Pro	Phe	Ser	Xaa	Gly	Lys	Gln
		115					120						125		

Arg	Xaa	Arg	Leu	Glu	Phe	Xaa	Ile	Ser	Ala	Leu	Ser	Ile	Gln	Glu	Pro
	130					135					140				

Ser	Asn	Gly	Thr	Ala	Leu	Ser	Xaa	Pro	Arg	Pro	Leu	Ser	Lys	Ala	Ser
145					150					155				160	

Gln	Gly	Ser	Gln	Ala	Leu	Lys	Ser	Ser	Gln	Gly	Ser	Arg	Ser	Ser	Ser
			165						170					175	

Leu	Asp	Ala	Leu	Gly	Pro	Thr	Arg	Lys	Glu	Glu	Glu	Ala	Ser	Phe	Trp
		180						185						190	

837

Lys Ile Asn Ala Glu Arg Ser Arg Gly Glu Gly Pro Glu Ala Glu Phe  
 195 200 205  
 Gln Ser Leu Thr Pro Ser Gln Ile Lys Ser Met Glu Lys Gly Glu Lys  
 210 215 220  
 Val Leu Pro Pro Cys Tyr Arg Gln Glu Pro Ala Pro Lys Asp Arg Glu  
 225 230 235 240  
 Ala Lys Val Glu Arg Pro Ser Thr Leu Arg Gln Glu Gln Arg Pro Leu  
 245 250 255  
 Pro Asn Val Ser Thr Glu Arg Glu Arg Pro Gln Pro Val Gln Ala Phe  
 260 265 270  
 Ser Ser Ala Leu His Glu Ala Ala Pro Ser Gln Leu Glu Gly Lys Leu  
 275 280 285  
 Pro Ser Pro Asp Val Arg Gln Asp Asp Gly Glu Asp Thr Leu Phe Ser  
 290 295 300  
 Glu Pro Lys Phe Ala Gln Val Xaa Ser Ser Asn Val Val Leu Xaa Thr  
 305 310 315 320  
 Gly Phe Asp Phe Leu Asp Asn Trp  
 325

&lt;210&gt; 790

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 790

Ala Ala Glu Ala Arg Ala Arg Pro Gly Val Thr Leu Arg Pro Phe Ala  
 1 5 10 15  
 Pro Leu Ser Gly Ala Ala Glu Ala Asp Glu Gly Gly Gly Asp Trp Ser  
 20 25 30  
 Xaa Ile Asp Cys Glu Met Glu Glu Val Asp Leu Gln Asp Leu Pro Ser  
 35 40 45  
 Ala Thr Ile Ala Cys His Leu Asp Pro Arg Val Phe Val Asp Gly Leu

838

50                                      55                                      60  
 Cys Arg Ala Lys Phe Glu Ser Leu Phe Arg Thr Tyr Asp Lys Asp Ile  
 65                                      70                                      75                                      80  
 Thr Phe Gln Tyr Phe Lys Ser Phe Lys Arg Val Arg Ile Asn Phe Ser  
 85                                      90                                      95  
 Asn Pro Phe Ser Ala Ala Asp Ala Arg Leu Gln Leu His Lys Thr Glu  
 100                                      105                                      110  
 Phe Leu Gly Lys Glu Met Lys Leu Tyr Phe Ala Gln Thr Leu His Ile  
 115                                      120                                      125  
 Gly Ser Ser His Leu Ala Pro Gln Ile Gln Thr Ser Ser Phe  
 130                                      135                                      140

<210> 791  
 <211> 322  
 <212> PRT  
 <213> Homo sapiens

<400> 791  
 Ala Gly Gly Pro Arg Ala Ala His Pro Val Cys Leu Cys Leu Leu Gln  
 1                                      5                                      10                                      15  
 Ser Ser Val Leu Ala Leu Val Arg Leu Arg Pro Gly Cys Thr Ala Gly  
 20                                      25                                      30  
 Thr Trp Ala Met Ser Pro His Pro Thr Ala Leu Leu Gly Leu Val Leu  
 35                                      40                                      45  
 Cys Leu Ala Gln Thr Ile His Thr Gln Glu Glu Asp Leu Pro Arg Pro  
 50                                      55                                      60  
 Ser Ile Ser Ala Glu Pro Gly Thr Val Ile Pro Leu Gly Ser His Val  
 65                                      70                                      75                                      80  
 Thr Phe Val Cys Arg Gly Pro Val Gly Val Gln Thr Phe Arg Leu Glu  
 85                                      90                                      95  
 Arg Glu Ser Arg Ser Thr Tyr Asn Asp Thr Glu Asp Val Ser Gln Ala  
 100                                      105                                      110  
 Ser Pro Ser Glu Ser Glu Ala Arg Phe Arg Ile Asp Ser Val Ser Glu  
 115                                      120                                      125  
 Gly Asn Ala Gly Pro Tyr Arg Cys Ile Tyr Tyr Lys Pro Pro Lys Trp  
 130                                      135                                      140



839

Ser Glu Gln Ser Asp Tyr Leu Glu Leu Leu Val Lys Glu Thr Ser Gly  
 145 150 155 160  
 Gly Pro Asp Ser Pro Asp Thr Glu Pro Gly Ser Ser Ala Gly Pro Thr  
 165 170 175  
 Gln Arg Pro Ser Asp Asn Ser His Asn Glu His Ala Pro Ala Ser Gln  
 180 185 190  
 Gly Leu Lys Ala Glu His Leu Tyr Ile Leu Ile Gly Val Ser Val Val  
 195 200 205  
 Phe Leu Phe Cys Leu Leu Leu Leu Val Leu Phe Cys Leu His Arg Gln  
 210 215 220  
 Asn Gln Ile Lys Gln Gly Pro Pro Arg Ser Lys Asp Glu Glu Gln Lys  
 225 230 235 240  
 Pro Gln Gln Arg Pro Asp Leu Ala Val Asp Val Leu Glu Arg Thr Ala  
 245 250 255  
 Asp Lys Ala Thr Val Asn Gly Leu Pro Glu Lys Asp Arg Glu Thr Asp  
 260 265 270  
 Thr Ser Ala Leu Ala Ala Gly Ser Ser Gln Glu Val Thr Tyr Ala Gln  
 275 280 285  
 Leu Asp His Trp Ala Leu Thr Gln Arg Thr Ala Arg Ala Val Ser Pro  
 290 295 300  
 Gln Ser Thr Lys Pro Met Ala Glu Ser Ile Thr Tyr Ala Ala Val Ala  
 305 310 315 320

Arg His

&lt;210&gt; 792

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 792

Pro Leu Leu Cys Leu Pro Ser Ile Met Lys Gly Leu Ala Ala Ala Leu  
 1 5 10 15

Leu Val Leu Val Cys Thr Met Ala Leu Cys Ser Cys Ala Gln Val Gly  
 20 25 30

840

Thr Asn Lys Glu Leu Cys Cys Leu Val Tyr Thr Ser Trp Gln Ile Pro  
                   35                                  40                                  45

Gln Lys Phe Ile Val Asp Tyr Ser Glu Thr Ser Pro Gln Cys Pro Lys  
           50                                  55                                  60

Pro Gly Val Ile Leu Leu Thr Lys Arg Gly Arg Gln Ile Cys Ala Asp  
       65                                  70                                  75                                  80

Pro Asn Lys Lys Trp Val Gln Lys Tyr Ile Ser Asp Leu Lys Leu Asn  
                                   85                                  90                                  95

Ala

<210> 793  
 <211> 267  
 <212> PRT  
 <213> Homo sapiens

<400> 793  
 Pro Pro Gly Leu Pro Gly Phe Gly Thr Ser His Thr Phe Ala Pro Ala  
       1                                  5                                  10                                  15

Ala Met Thr Leu Ser Pro Leu Leu Leu Phe Leu Pro Pro Leu Leu Leu  
                   20                                  25                                  30

Leu Leu Asp Val Pro Thr Ala Ala Val Gln Ala Ser Pro Leu Gln Ala  
           35                                  40                                  45

Leu Asp Phe Phe Gly Asn Gly Pro Pro Val Asn Tyr Lys Thr Gly Asn  
       50                                  55                                  60

Leu Tyr Leu Arg Gly Pro Leu Lys Lys Ser Asn Ala Pro Leu Val Asn  
       65                                  70                                  75                                  80

Val Thr Leu Tyr Tyr Glu Ala Leu Cys Gly Gly Cys Arg Ala Phe Leu  
                                   85                                  90                                  95

Ile Arg Glu Leu Phe Pro Thr Trp Leu Leu Val Met Glu Ile Leu Asn  
                   100                                  105                                  110

Val Thr Leu Val Pro Tyr Gly Asn Ala Gln Glu Gln Asn Val Ser Gly  
           115                                  120                                  125

Arg Trp Glu Phe Lys Cys Gln His Gly Glu Glu Glu Cys Lys Phe Asn  
       130                                  135                                  140

Lys Val Glu Ala Cys Val Leu Asp Glu Leu Asp Met Glu Leu Ala Phe

145	150								155				160			
Leu	Thr	Ile	Val	Cys	Met	Glu	Glu	Phe	Glu	Asp	Met	Glu	Arg	Ser	Leu	
				165					170					175		
Pro	Leu	Cys	Leu	Gln	Leu	Tyr	Ala	Pro	Gly	Leu	Ser	Pro	Asp	Thr	Ile	
			180					185					190			
Met	Glu	Cys	Ala	Met	Gly	Asp	Arg	Gly	Met	Gln	Leu	Met	His	Ala	Asn	
		195					200					205				
Ala	Gln	Arg	Thr	Asp	Ala	Leu	Gln	Pro	Pro	His	Glu	Tyr	Val	Pro	Trp	
	210					215					220					
Val	Thr	Val	Asn	Gly	Lys	Pro	Leu	Glu	Asp	Gln	Thr	Gln	Leu	Leu	Thr	
225					230					235					240	
Leu	Val	Cys	Gln	Leu	Tyr	Gln	Gly	Lys	Lys	Pro	Asp	Val	Cys	Pro	Ser	
				245					250					255		
Ser	Thr	Ser	Ser	Leu	Arg	Ser	Val	Cys	Phe	Lys						
			260					265								

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<210> 794
<211> 297
<212> PRT
<213> Homo sapiens
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<400> 794
Gln Tyr Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser Ala Ala Ser
 1          .5          10          15
Thr Arg Pro Gln Phe Leu Ile Thr Val Pro Val Leu Thr Val Ile Asn
          20          25          30
Tyr Arg Pro His Asn Met Arg Pro Glu Asp Arg Met Phe His Ile Arg
          35          40          45
Ala Val Ile Leu Arg Ala Leu Ser Leu Ala Phe Leu Leu Ser Leu Arg
          50          55          60
Gly Ala Gly Ala Ile Lys Ala Asp His Val Ser Thr Tyr Ala Ala Phe
65          70          75          80
Val Gln Thr His Arg Pro Thr Gly Glu Phe Met Phe Glu Phe Asp Glu
          85          90          95
Asp Glu Met Phe Tyr Val Asp Leu Asp Lys Lys Glu Thr Val Trp His
          100          105          110

```

842

Leu Glu Glu Phe Gly Gln Ala Phe Ser Phe Glu Ala Gln Gly Gly Leu  
 115 120 125  
 Ala Asn Ile Ala Ile Leu Asn Asn Asn Leu Asn Thr Leu Ile Gln Arg  
 130 135 140  
 Ser Asn His Thr Gln Ala Thr Asn Asp Pro Pro Glu Val Thr Val Phe  
 145 150 155 160  
 Pro Lys Glu Pro Val Glu Leu Gly Gln Pro Asn Thr Leu Ile Cys His  
 165 170 175  
 Ile Asp Lys Phe Phe Pro Pro Val Leu Asn Val Thr Trp Leu Cys Asn  
 180 185 190  
 Gly Glu Leu Val Thr Glu Gly Val Ala Glu Ser Leu Phe Leu Pro Arg  
 195 200 205  
 Thr Asp Tyr Ser Phe His Lys Phe His Tyr Leu Thr Phe Val Pro Ser  
 210 215 220  
 Ala Glu Asp Phe Tyr Asp Cys Arg Val Glu His Trp Gly Leu Asp Gln  
 225 230 235 240  
 Pro Leu Leu Lys His Trp Glu Ala Gln Glu Pro Ile Gln Met Pro Glu  
 245 250 255  
 Thr Thr Glu Thr Val Leu Cys Ala Leu Gly Leu Val Leu Gly Leu Val  
 260 265 270  
 Gly Ile Ile Val Gly Thr Val Leu Ile Ile Lys Ser Leu Arg Ser Gly  
 275 280 285  
 His Asp Pro Arg Ala Gln Gly Thr Leu  
 290 295

&lt;210&gt; 795

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

843

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 795

Ile	Gly	Trp	Glu	Val	Ser	Phe	Trp	Ile	Cys	Phe	Glu	Thr	Val	Pro	Glu
1				5				10					15		

Arg	Arg	Leu	Pro	Phe	Pro	Arg	His	Phe	His	Arg	Gln	Gln	Phe	Gly	Asp
		20					25						30		

Ser	Phe	Ala	Ala	Lys	Tyr	Xaa	Leu	Val	Asn	Tyr	Phe	Pro	Ala	Gln	Arg
		35					40					45			

Leu	Arg	Ala	Lys	Gln	Gln	Met	Arg	Val	Ser	Val	Pro	Xaa	Lys	Ser	Glu
	50					55					60				

Asp	Val	Ala	Ile	Glu	Arg	Thr	Val	Phe	Ser	Tyr	Val	Ser	Arg	Leu	Ser
65					70					75				80	

Tyr	Ala	Thr	Val	Ser	Lys	Pro	Ala	Pro	Thr	Val	Arg	Lys	Cys	Val	Arg
				85					90					95	

His	Arg	Thr	Gln	Leu	Ala	Met	Cys	Phe	Leu	Ser	Gln	Gly	Asp	Thr	Cys
			100					105					110		

Ile

&lt;210&gt; 796

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 796

Lys	Met	Ser	Glu	Tyr	Ile	Arg	Val	Thr	Glu	Asp	Glu	Asn	Asp	Glu	Pro
1				5				10					15		

Ile	Glu	Ile	Pro	Ser	Glu	Asp	Asp	Gly	Thr	Val	Leu	Leu	Ser	Thr	Val
			20					25					30		

Thr	Ala	Gln	Phe	Pro	Gly	Ala	Cys	Gly	Leu	Arg	Tyr	Arg	Asn	Pro	Val
		35					40					45			

Ser	Gln	Cys	Met	Arg	Gly	Val	Arg	Leu	Val	Glu	Gly	Ile	Leu	His	Ala
	50					55					60				

Pro	Asp	Ala	Gly	Trp	Gly	Asn	Leu	Val	Tyr	Val	Val	Asn	Tyr	Pro	Lys
65					70					75				80	

844

Asp	Asn	Lys	Arg	Lys	Met	Asp	Glu	Thr	Asp	Ala	Ser	Ser	Ala	Val	Lys	85	90	95
Val	Lys	Arg	Ala	Val	Gln	Lys	Thr	Ser	Asp	Leu	Ile	Val	Leu	Gly	Leu	100	105	110
Pro	Trp	Lys	Thr	Thr	Glu	Gln	Asp	Leu	Lys	Glu	Tyr	Phe	Ser	Thr	Phe	115	120	125
Gly	Glu	Val	Leu	Met	Val	Gln	Val	Lys	Lys	Asp	Leu	Lys	Thr	Gly	His	130	135	140
Ser	Lys	Gly	Phe	Gly	Phe	Val	Arg	Phe	Thr	Glu	Tyr	Glu	Thr	Gln	Val	145	150	155
Lys	Val	Met	Ser	Gln	Arg	His	Met	Ile	Asp	Gly	Arg	Trp	Cys	Asp	Cys	165	170	175
Lys	Leu	Pro	Asn	Ser	Lys	Gln	Ser	Gln	Asp	Glu	Pro	Leu	Arg	Ser	Arg	180	185	190
Lys	Val	Phe	Val	Gly	Arg	Cys	Thr	Glu	Asp	Met	Thr	Glu	Asp	Glu	Leu	195	200	205
Arg	Glu	Phe	Phe	Ser	Gln	Tyr	Gly	Asp	Val	Met	Asp	Val	Phe	Ile	Pro	210	215	220
Lys	Pro	Phe	Arg	Ala	Phe	Ala	Phe	Val	Thr	Phe	Ala	Asp	Asp	Gln	Ile	225	230	235
Ala	Gln	Ser	Leu	Cys	Gly	Glu	Asp	Leu	Ile	Ile	Lys	Gly	Ile	Ser	Val	245	250	255
His	Ile	Ser	Asn	Ala	Glu	Pro	Lys	His	Asn	Ser	Asn	Arg	Gln	Leu	Glu	260	265	270
Arg	Ser	Gly	Arg	Phe	Gly	Gly	Asn	Pro	Gly	Gly	Phe	Gly	Asn	Gln	Gly	275	280	285
Gly	Phe	Gly	Asn	Ser	Arg	Gly	Gly	Gly	Ala	Gly	Leu	Gly	Asn	Asn	Gln	290	295	300
Gly	Ser	Asn	Met	Gly	Gly	Gly	Met	Asn	Phe	Gly	Ala	Phe	Ser	Ile	Asn	305	310	315
Pro	Ala	Met	Met	Ala	Ala	Ala	Gln	Ala	Ala	Leu	Gln	Ser	Ser	Trp	Gly	325	330	335
Met	Met	Gly	Met	Leu	Ala	Ser	Gln	Gln	Asn	Gln	Ser	Gly	Pro	Ser	Gly	340	345	350

845

Asn Asn Gln Asn Gln Gly Asn Met Gln Arg Glu Pro Asn Gln Ala Phe  
355 360 365

Gly Ser Gly Asn Asn Ser Tyr Ser Gly Ser Asn Ser Gly Ala Ala Ile  
370 375 380

Gly Trp Gly Ser Ala Ser Asn Ala Gly Ser Gly Ser Gly Phe Asn Gly  
385 390 395 400

Gly Phe Gly Ser Ser Met Asp Ser Lys Ser Ser Gly Trp Gly Met  
405 410 415

<210> 797  
<211> 609  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (170)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (446)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (506)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (577)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (583)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (584)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE

846

&lt;222&gt; (599)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (608)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 797

Leu	Thr	Ala	Leu	Arg	Trp	Leu	Leu	Arg	Gly	Gln	Glu	Lys	Arg	Thr	Leu
1				5					10					15	

Gly	Ser	Ser	Gln	Ser	Asp	Phe	Leu	Thr	Pro	Pro	Val	Gly	Gly	Ala	Pro
			20					25					30		

Trp	Ala	Val	Ala	Thr	Thr	Val	Val	Met	Tyr	Pro	Pro	Pro	Pro	Pro	Pro
	35						40					45			

Pro	His	Arg	Asp	Phe	Ile	Ser	Val	Thr	Leu	Ser	Phe	Gly	Glu	Ser	Tyr
	50					55					60				

Asp	Asn	Ser	Lys	Ser	Trp	Arg	Arg	Arg	Ser	Cys	Trp	Arg	Lys	Trp	Lys
65					70					75					80

Gln	Leu	Ser	Arg	Leu	Gln	Arg	Asn	Met	Ile	Leu	Phe	Leu	Leu	Ala	Phe
				85					90					95	

Leu	Leu	Phe	Cys	Gly	Leu	Leu	Phe	Tyr	Ile	Asn	Leu	Ala	Asp	His	Trp
			100					105					110		

Lys	Ala	Leu	Ala	Phe	Arg	Leu	Glu	Glu	Glu	Gln	Lys	Met	Arg	Pro	Glu
	115						120					125			

Ile	Ala	Gly	Leu	Lys	Pro	Ala	Asn	Pro	Pro	Val	Leu	Pro	Ala	Pro	Gln
130						135					140				

Lys	Ala	Asp	Thr	Asp	Pro	Glu	Asn	Leu	Pro	Glu	Ile	Ser	Ser	Gln	Lys
145					150					155					160

Thr	Gln	Arg	His	Ile	Gln	Arg	Gly	Pro	Xaa	His	Leu	Gln	Ile	Arg	Pro
				165					170					175	

Pro	Ser	Gln	Asp	Leu	Lys	Asp	Gly	Thr	Gln	Glu	Glu	Ala	Thr	Lys	Arg
			180					185					190		

Gln	Glu	Ala	Pro	Val	Asp	Pro	Arg	Pro	Glu	Gly	Asp	Pro	Gln	Arg	Thr
	195						200					205			

Val	Ile	Ser	Trp	Arg	Gly	Ala	Val	Ile	Glu	Pro	Glu	Gln	Gly	Thr	Glu
	210					215					220				



847

Leu Pro Ser Arg Arg Ala Glu Val Pro Thr Lys Pro Pro Leu Pro Pro  
 225 230 235 240

Ala Arg Thr Gln Gly Thr Pro Val His Leu Asn Tyr Arg Gln Lys Gly  
 245 250 255

Val Ile Asp Val Phe Leu His Ala Trp Lys Gly Tyr Arg Lys Phe Ala  
 260 265 270

Trp Gly His Asp Glu Leu Lys Pro Val Ser Arg Ser Phe Ser Glu Trp  
 275 280 285

Phe Gly Leu Gly Leu Thr Leu Ile Asp Ala Leu Asp Thr Met Trp Ile  
 290 295 300

Leu Gly Leu Arg Lys Glu Phe Glu Glu Ala Arg Lys Trp Val Ser Lys  
 305 310 315 320

Lys Leu His Phe Glu Lys Asp Val Asp Val Asn Leu Phe Glu Ser Thr  
 325 330 335

Ile Arg Ile Leu Gly Gly Leu Leu Ser Ala Tyr His Leu Ser Gly Asp  
 340 345 350

Ser Leu Phe Leu Arg Lys Ala Glu Asp Phe Gly Asn Arg Leu Met Pro  
 355 360 365

Ala Phe Arg Thr Pro Ser Lys Ile Pro Tyr Ser Asp Val Asn Ile Gly  
 370 375 380

Thr Gly Val Ala His Pro Pro Arg Trp Thr Ser Asp Ser Thr Val Ala  
 385 390 395 400

Glu Val Thr Ser Ile Gln Leu Glu Phe Arg Glu Leu Ser Arg Leu Thr  
 405 410 415

Gly Asp Lys Lys Phe Gln Glu Ala Val Glu Lys Val Thr Gln His Ile  
 420 425 430

His Gly Leu Ser Gly Lys Lys Asp Gly Leu Val Pro Cys Xaa Ile Asn  
 435 440 445

Thr His Ser Gly Leu Phe Thr His Leu Gly Val Phe Thr Leu Gly Ala  
 450 455 460

Arg Ala Asp Ser Tyr Tyr Glu Tyr Leu Leu Lys Gln Trp Ile Gln Gly  
 465 470 475 480

Gly Lys Gln Glu Thr Gln Leu Leu Glu Asp Tyr Val Glu Ala Ile Glu  
 485 490 495

848

Gly Val Arg Thr His Leu Leu Arg His Xaa Glu Pro Ser Lys Leu Thr  
                   500                  505                  510  
 Phe Val Gly Glu Leu Ala His Gly Arg Phe Ser Ala Lys Met Asp His  
                   515                  520                  525  
 Leu Val Cys Phe Leu Pro Gly Thr Leu Ala Leu Gly Val Tyr His Gly  
                   530                  535                  540  
 Leu Pro Ala Ser His Met Glu Leu Ala Gln Glu Leu Met Glu Thr Cys  
                   545                  550                  555                  560  
 Tyr Gln Met Asn Arg Gln Met Glu Thr Gly Leu Ser Pro Glu Ile Val  
                   565                  570                  575  
 Xaa Phe Asn Phe Thr Pro Xaa Xaa Pro Gly Gly Pro Gly Ser Gly Gly  
                   580                  585                  590  
 Asn Arg Leu Gly Lys Gly Xaa Pro Lys Arg Ala Pro Lys Gly Pro Xaa  
                   595                  600                  605

Glu

<210> 798  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 798  
 Leu Leu Pro His Pro Gly Arg Met Leu Thr Phe Met Glu Ala Asp Met  
   1                  5                  10                  15  
 Cys Thr Gln Asn Gln Arg Glu Pro Val Ile Leu Ser Trp Arg Ser Gln  
                   20                  25                  30  
 Lys Thr Ser Ala Tyr Ser Ser Phe Arg Trp Met Ala Gln Glu Ser Ser  
                   35                  40                  45  
 Glu Pro Met Gly Asp Leu Ile Tyr Tyr His Ile Arg Leu Leu Gly Met  
                   50                  55                  60  
 Asn Ile Cys Val Ile Phe Pro Asn Asp Leu Thr Leu Phe Tyr Leu Cys  
                   65                  70                  75                  80  
 Ile Gln Phe Leu Cys His Asn Val Leu Phe Cys Phe Ser Phe Ser Ile  
                   85                  90                  95  
 Val Glu Glu Gly Arg Ser Ser Lys Leu Leu

849

100

105

&lt;210&gt; 799

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 799

Cys Asn Leu Ile Gln Ser Asp Tyr Ser Val Ala Leu Pro His Gly Lys  
 1 5 10 15

Ser Tyr Phe Phe Arg Ser Lys Lys Leu Asn Ser Met Leu Val Thr Trp  
 20 25 30

Phe Gln Leu Glu Phe Ser Phe Asn Val Asn Lys Ile Glu Thr Leu Val  
 35 40 45

Phe Ser Gly Glu Trp Lys Glu Leu Pro Leu Leu Gln Val Met Lys Pro  
 50 55 60

Asp Leu Ile Met Lys Leu Leu Asn His Ser Ser Cys Val Gln Asn Tyr  
 65 70 75 80

Cys Phe Phe Cys Leu Phe Phe Leu Phe Val Thr Val Tyr Ile Lys Ile  
 85 90 95

Leu Glu Asp Ala Leu Leu Cys Lys Lys Lys Lys Lys Lys Lys Arg  
 100 105 110

Ala Ala

&lt;210&gt; 800

&lt;211&gt; 363

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (358)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 800

Asn Ile Ser Ile Arg Arg Glu Tyr Ile Lys Gln Asn Pro Met Ala Thr  
 1 5 10 15

Glu Lys Leu Leu Ser Leu Leu Pro Glu Tyr Val Val Pro Tyr Met Ile

20				25				30							
His	Leu	Leu	Ala	His	Asp	Pro	Asp	Phe	Thr	Arg	Ser	Gln	Asp	Val	Asp
35				40				45							
Gln	Leu	Arg	Asp	Ile	Lys	Glu	Cys	Leu	Trp	Phe	Met	Leu	Glu	Val	Leu
50				55				60							
Met	Thr	Lys	Asn	Glu	Asn	Asn	Ser	His	Ala	Phe	Met	Lys	Lys	Met	Ala
65				70				75				80			
Glu	Asn	Ile	Lys	Leu	Thr	Arg	Asp	Ala	Gln	Ser	Pro	Asp	Glu	Ser	Lys
85				90				95							
Thr	Asn	Glu	Lys	Leu	Tyr	Thr	Val	Cys	Asp	Val	Ala	Leu	Cys	Val	Ile
100				105				110							
Asn	Ser	Lys	Ser	Ala	Leu	Cys	Asn	Ala	Asp	Ser	Pro	Lys	Asp	Pro	Val
115				120				125							
Leu	Pro	Met	Lys	Phe	Phe	Thr	Gln	Pro	Glu	Lys	Asp	Phe	Cys	Asn	Asp
130				135				140							
Lys	Ser	Tyr	Ile	Ser	Glu	Glu	Thr	Arg	Val	Leu	Leu	Leu	Thr	Gly	Lys
145				150				155				160			
Pro	Lys	Pro	Ala	Gly	Val	Leu	Gly	Ala	Val	Asn	Lys	Pro	Leu	Ser	Ala
165				170				175							
Thr	Gly	Arg	Lys	Pro	Tyr	Val	Arg	Ser	Thr	Gly	Thr	Glu	Thr	Gly	Ser
180				185				190							
Asn	Ile	Asn	Val	Asn	Ser	Glu	Leu	Asn	Pro	Ser	Thr	Gly	Asn	Arg	Ser
195				200				205							
Arg	Glu	Gln	Ser	Ser	Glu	Ala	Ala	Glu	Thr	Gly	Val	Ser	Glu	Asn	Glu
210				215				220							
Glu	Asn	Pro	Val	Arg	Ile	Ile	Ser	Val	Thr	Pro	Val	Lys	Asn	Ile	Asp
225				230				235				240			
Pro	Val	Lys	Asn	Lys	Glu	Ile	Asn	Ser	Asp	Gln	Ala	Thr	Gln	Gly	Asn
245				250				255							
Ile	Ser	Ser	Asp	Arg	Gly	Lys	Lys	Arg	Thr	Val	Thr	Ala	Ala	Gly	Ala
260				265				270							
Glu	Asn	Ile	Gln	Gln	Lys	Thr	Asp	Glu	Lys	Val	Asp	Glu	Ser	Gly	Pro
275				280				285							
Pro	Ala	Pro	Ser	Lys	Pro	Arg	Arg	Gly	Arg	Arg	Pro	Lys	Ser	Glu	Ser

851

290		295		300
Gln Gly Asn Ala Thr Lys Asn Asp Asp Leu Asn Lys Pro Ile Asn Lys				
305		310		315 320
Gly Arg Lys Arg Ala Ala Val Gly Gln Glu Ser Pro Gly Gly Leu Glu				
	325		330	335
Ala Gly Asn Ala Lys Ala Pro Lys Leu Gln Asp Leu Ala Lys Lys Ala				
	340		345	350
Ala Pro Ala Glu Arg Xaa Ile Asp Leu Gln Arg				
	355		360	

&lt;210&gt; 801

&lt;211&gt; 581

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 801

Xaa Ser Ser Asn Thr Thr His Tyr Arg Gly Gly Ser Ala Ser Glu Ala				
1		5		10 15
Ala Met Ser Tyr Pro Ala Asp Asp Tyr Glu Ser Glu Ala Ala Tyr Asp				
	20		25	30
Pro Tyr Ala Tyr Pro Ser Asp Tyr Asp Met His Thr Gly Asp Pro Lys				
	35		40	45
Gln Asp Leu Ala Tyr Glu Arg Gln Tyr Glu Gln Gln Thr Tyr Gln Val				
	50		55	60
Ile Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val				
	65		70	75 80
Ser Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val				
	85		90	95
Ser Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr				
	100		105	110
Glu Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro				
	115		120	125

852

Trp Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val  
 130 135 140

Phe Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala Lys  
 145 150 155 160

Val Ser Gly Gly Pro Ser Leu Glu Gln Arg Phe Glu Ser Tyr Tyr Asn  
 165 170 175

Tyr Cys Asn Leu Phe Asn Tyr Ile Leu Asn Ala Asp Gly Pro Ala Pro  
 180 185 190

Leu Glu Leu Pro Asn Gln Trp Leu Trp Asp Ile Ile Asp Glu Phe Ile  
 195 200 205

Tyr Gln Phe Gln Ser Phe Ser Gln Tyr Arg Cys Lys Thr Ala Lys Lys  
 210 215 220

Ser Glu Glu Glu Ile Asp Phe Leu Arg Ser Asn Pro Lys Ile Trp Asn  
 225 230 235 240

Val His Ser Val Leu Asn Val Leu His Ser Leu Val Asp Lys Ser Asn  
 245 250 255

Ile Asn Arg Gln Leu Glu Val Tyr Thr Ser Gly Gly Asp Pro Glu Ser  
 260 265 270

Val Ala Gly Glu Tyr Gly Arg His Ser Leu Tyr Lys Met Leu Gly Tyr  
 275 280 285

Phe Ser Leu Val Gly Leu Leu Arg Leu His Ser Leu Leu Gly Asp Tyr  
 290 295 300

Tyr Gln Ala Ile Lys Val Leu Glu Asn Ile Glu Leu Asn Lys Lys Ser  
 305 310 315 320

Met Tyr Ser Arg Val Pro Glu Cys Gln Val Thr Thr Tyr Tyr Tyr Val  
 325 330 335

Gly Phe Ala Tyr Leu Met Met Arg Arg Tyr Gln Asp Ala Ile Arg Val  
 340 345 350

Phe Ala Asn Ile Leu Leu Tyr Ile Gln Arg Thr Lys Ser Met Phe Gln  
 355 360 365

Arg Thr Thr Tyr Lys Tyr Glu Met Ile Asn Lys Gln Asn Glu Gln Met  
 370 375 380

His Ala Leu Leu Ala Ile Ala Leu Thr Met Tyr Pro Met Arg Ile Asp  
 385 390 395 400

853

Glu Ser Ile His Leu Gln Leu Arg Glu Lys Tyr Gly Asp Lys Met Leu  
                                   405                                  410                                  415  
 Arg Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr  
                                   420                                  425                                  430  
 Ser Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val  
                                   435                                  440                                  445  
 His Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe  
                                   450                                  455                                  460  
 Ser Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe  
 465                                  470                                  475                                  480  
 Leu Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu  
                                   485                                  490                                  495  
 Asp Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His  
                                   500                                  505                                  510  
 Lys Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly  
                                   515                                  520                                  525  
 Glu Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met  
                                   530                                  535                                  540  
 Ile His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe  
 545                                  550                                  555                                  560  
 Ile Arg Gln Ile His Lys Phe Glu Glu Leu Asn Arg Thr Leu Lys Lys  
                                   565                                  570                                  575  
 Met Gly Gln Arg Pro  
                                   580

&lt;210&gt; 802

&lt;211&gt; 302

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 802

Ala Ser Glu Pro Trp Ala Ser Glu Leu Trp Leu Trp Val Asp Gly Gly  
   1                                  5                                  10                                  15  
 Asp Thr Pro Arg Arg Arg Arg Arg Glu Gly Arg Arg Gly Leu His Leu  
                                   20                                  25                                  30  
 His Ala Ser Arg Leu Pro Leu Pro Ser Ala Pro Gly Pro Cys Ser Ser

854

35	40	45
Leu Gln Asp Gln Ala Met Glu Leu Glu Val Arg Arg Val Arg Gln Ala		
50	55	60
Phe Leu Ser Gly Arg Ser Arg Pro Leu Arg Phe Arg Leu Gln Gln Leu		
65	70	75
Glu Ala Leu Arg Arg Met Val Gln Glu Arg Glu Lys Asp Ile Leu Thr		
	85	90
Ala Ile Ala Ala Asp Leu Cys Lys Ser Glu Phe Asn Val Tyr Ser Gln		
	100	105
Glu Val Ile Thr Val Leu Gly Glu Ile Asp Phe Met Leu Glu Asn Leu		
	115	120
Pro Glu Trp Val Thr Ala Lys Pro Val Lys Lys Asn Val Leu Thr Met		
	130	135
Leu Asp Glu Ala Tyr Ile Gln Pro Gln Pro Leu Gly Val Val Leu Ile		
	145	150
Ile Gly Ala Trp Asn Tyr Pro Phe Val Leu Thr Ile Gln Pro Leu Ile		
	165	170
Gly Ala Ile Ala Ala Gly Asn Ala Val Ile Ile Lys Pro Ser Glu Leu		
	180	185
Ser Glu Asn Thr Ala Lys Ile Leu Ala Lys Leu Leu Pro Gln Tyr Leu		
	195	200
Asp Gln Asp Leu Tyr Ile Val Ile Asn Gly Gly Val Glu Glu Thr Thr		
	210	215
Glu Leu Leu Lys Gln Arg Phe Asp His Ile Phe Tyr Thr Gly Asn Thr		
	225	230
Ala Val Gly Lys Ile Val Met Glu Ala Ala Ala Lys His Leu Thr Pro		
	245	250
Val Thr Leu Glu Leu Gly Gly Lys Ser Pro Cys Tyr Ile Asp Lys Asp		
	260	265
Cys Asp Leu Gly His Cys Leu Gln Thr His Asn Leu Gly Lys Ile His		
	275	280
Glu Leu Trp Pro Asn Leu His Cys Thr Arg Leu Tyr Ser Leu		
	290	295
		300



855

&lt;210&gt; 803

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 803

Pro	Leu	Gly	Arg	Leu	Arg	Gln	Glu	Asn	Arg	Leu	Asn	Pro	Gly	Gly	Gly
1				5					10					15	
Gly	Cys	Ser	Glu	Pro	Arg	Ser	His	His	Cys	Thr	Pro	Ala	Trp	Val	Met
			20					25					30		
Glu	Arg	Asp	Ser	Ile	Ser	Lys	Lys	Lys	Leu	Cys	Met				
			35					40							

&lt;210&gt; 804

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (23)

856

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (87)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (97)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 804

Ala Ile Leu Arg Leu Xaa Leu Xaa Gly Arg Xaa Leu Thr Xaa Xaa Leu  
1 5 10 15

857

Met Lys Ile Leu Val Glu Xaa Arg Leu Gln Leu His His His Gly Arg  
                   20                  25                  30

Xaa Gly Lys Ser Cys Xaa Thr Ser Arg Arg Ser Cys Ala Thr Ser Pro  
           35                  40                  45

Trp Asp Phe Xaa Xaa Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu  
       50                  55                  60

Glu Lys Ser Tyr Xaa Leu Pro Asp Gly Gln Val Ile Thr Ile Xaa Asn  
    65                  70                  75                  80

Glu Arg Phe Arg Cys Pro Xaa Gly Ala Val Pro Ala Xaa Pro Ser Trp  
                   85                  90                  95

Xaa

&lt;210&gt; 805

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 805

Tyr Thr Leu Leu Glu Leu Glu Leu Pro Arg Leu Leu Ala Pro Asp Leu  
    1                  5                  10                  15

Pro Ser Asn Gly Ser Ser Leu Lys Asp Leu Lys Trp Thr His Ser Asn  
           20                  25                  30

Tyr Arg Ala Ser Lys Glu Ser Cys Ile Val Ile Phe Arg His Tyr Leu  
       35                  40                  45

Pro Gly Ser Gly Val Gly Asn Leu Arg Ala Cys Xaa Leu Pro Trp Met  
       50                  55                  60

Trp

65

&lt;210&gt; 806

&lt;211&gt; 58

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 806

Glu	Gln	Gly	Gln	Ser	Asn	Asn	Asn	Ser	Asp	Thr	Cys	Ala	Glu	Phe	Arg
1				5				10					15		

Ile	Lys	Tyr	Val	Gly	Ala	Ile	Glu	Lys	Leu	Lys	Leu	Ser	Glu	Gly	Lys
			20					25					30		

Gly	Leu	Glu	Gly	Pro	Leu	Arg	Pro	Asp	Lys	Xaa	Xaa	Xaa	Thr	Leu	Ala
		35					40						45		

Gln	Gln	Gly	Trp	Xaa	Val	Cys	Leu	Leu	Phe
		50				55			

<210> 807

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

859

<220>  
<221> SITE  
<222> (8)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (10)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (13)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (14)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (15)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (49)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 807  
Ile Arg Xaa Ser Ser Xaa Trp Xaa Xaa Xaa Arg Gly Xaa Xaa Xaa Ile  
1 5 10 15  
Glu Asp Tyr Arg Gly Asn Val Gly Val Val Leu Phe Asn Phe Gly Lys  
20 25 30  
Glu Lys Phe Glu Val Lys Lys Gly Asp Arg Ile Ala Gln Leu His Leu  
35 40 45  
Xaa Thr Asp Phe Leu Ser Arg Asn Arg Arg Ser Ser Ser Leu Gly  
50 55 60

860

<210> 808  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (142)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (147)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (152)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 808  
 Ala Ser Gln Leu Pro Asp Tyr Ser Ile Ser Pro Pro Ser Leu Pro Pro  
   1                  5                  10                  15  
 Arg Ile Ser Phe His Pro Ser Pro Thr Leu Ala Arg Val Ala Met Ala  
                   20                  25                  30  
 Glu Pro Ser Ala Ala Thr Gln Ser His Ser Ile Ser Ser Ser Ser Phe  
           35                  40                  45  
 Gly Ala Glu Pro Ser Ala Pro Gly Gly Gly Gly Ser Pro Gly Ala Cys  
       50                  55                  60  
 Pro Ala Leu Gly Thr Lys Ser Cys Ser Ser Ser Cys Ala Val His Asp  
   65                  70                  75                  80  
 Leu Ile Phe Trp Arg Asp Val Lys Lys Thr Gly Phe Val Phe Gly Thr  
                   85                  90                  95  
 Thr Leu Ile Met Leu Leu Ser Leu Ala Ala Phe Ser Val Ile Ser Val  
           100                  105                  110  
 Val Ser Tyr Leu Ile Leu Ala Leu Leu Ser Val Thr Ile Ser Phe Arg  
       115                  120                  125  
 Ile Tyr Lys Ser Val Ile Gln Ala Val Gln Lys Ser Glu Xaa Gly His  
       130                  135                  140  
 Pro Phe Xaa Ala Tyr Leu Asp Xaa Thr Leu Leu Cys Pro Gln Asn Phe  
   145                  150                  155                  160

861

Pro

<210> 809  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (22)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 809  
 Glu Thr Pro Ala Gly Cys Xaa Ile Asn Ser Ser Ser Ala Ser Ser Pro  
     1                  5                  10                  15  
 Ala Ser His Leu Leu Xaa Ala Pro Arg Gln Ser Ala Gln Ser His Val  
                   20                  25                  30  
 His Pro Arg Ser Ala Leu Ser Pro Ala His His Gln Ser Val His Ser  
                   35                  40                  45  
 Pro Ala His Leu Ser Ser Ala Ser Arg Asn Val Leu Leu  
           50                  55                  60

<210> 810  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (44)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

862

&lt;221&gt; SITE

&lt;222&gt; (76)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 810

Thr	Glu	Val	Ala	Arg	Val	Arg	Leu	Leu	Arg	Pro	Ser	Xaa	Ala	Ala	Ala
1				5					10					15	

Met	Arg	Tyr	Val	Ala	Ser	Tyr	Leu	Leu	Ala	Ala	Leu	Gly	Gly	Asn	Ser
			20					25						30	

Ser	Pro	Ser	Ala	Lys	Asp	Ile	Lys	Lys	Ile	Leu	Xaa	Ser	Val	Gly	Ile
			35				40						45		

Glu	Ala	Asp	Asp	Asp	Arg	Leu	Asn	Lys	Val	Ile	Ser	Glu	Leu	Asn	Gly
			50				55				60				

Lys	Asn	Ile	Glu	Asp	Val	Ile	Ala	Gln	Gly	Ile	Xaa	Lys	Leu	Ala	Ser
	65					70				75					80

Val	Pro	Ala	Gly	Trp	Gly	Leu
				85		

&lt;210&gt; 811

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;



<221> SITE  
<222> (40)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (47)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (64)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (87)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (89)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (91)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (92)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (93)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (94)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (99)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE

864

&lt;222&gt; (100)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 811

Ala	Pro	Ser	Cys	Ser	Trp	Leu	Ser	Ser	Gly	Xaa	Arg	Ser	Xaa	Pro	Asp
1				5					10					15	
Phe	Pro	Thr	Pro	Gly	Val	Val	Phe	Arg	Asp	Ile	Ser	Pro	Val	Leu	Lys
			20					25					30		
Asp	Pro	Xaa	Xaa	Phe	Arg	Ala	Xaa	Ile	Gly	Leu	Leu	Ala	Arg	Xaa	Leu
		35					40						45		
Lys	Ala	Thr	His	Gly	Gly	Arg	Ile	Asp	Tyr	Ile	Ala	Gly	Leu	Asp	Xaa
	50					55					60				
Arg	Arg	Val	Pro	Leu	Leu	Ala	Leu	Pro	Gly	Pro	Gly	Ala	Leu	Asp	Trp
65					70					75					80
Ala	Ala	Trp	Leu	Ile	Arg	Xaa	Arg	Xaa	Glu	Xaa	Xaa	Xaa	Xaa	Pro	Ile
				85					90					95	
Leu	Trp	Xaa	Xaa												
				100											

&lt;210&gt; 812

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (78)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 812

Thr	Ser	Gln	Val	Arg	Gln	Asn	Tyr	His	Gln	Asp	Ser	Glu	Ala	Ala	Ile
1				5					10					15	
Asn	Arg	Gln	Ile	Asn	Leu	Glu	Leu	Tyr	Ala	Ser	Tyr	Val	Tyr	Leu	Ser
			20					25					30		
Met	Ser	Tyr	Tyr	Phe	Asp	Arg	Asp	Asp	Val	Ala	Leu	Lys	Asn	Phe	Ala
		35				40						45			
Lys	Tyr	Phe	Leu	His	Gln	Ser	His	Glu	Glu	Arg	Glu	His	Ala	Glu	Lys
	50				55					60					
Leu	Met	Lys	Leu	Gln	Asn	His	Glu	Val	Ala	Glu	Ser	Ser	Xaa	Gly	Tyr

865

65

70

75

80

Gln Glu Thr Arg Leu  
85

&lt;210&gt; 813

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (68)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

866

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (76)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 813

Lys	Leu	Val	Arg	Xaa	Pro	Val	Gln	Val	Xaa	Gly	Ile	Glu	Gly	Xaa	Tyr
1				5					10					15	

Xaa	Thr	Xaa	Leu	Tyr	Ser	Ala	Ala	Ser	Lys	Gln	Asn	Lys	Leu	Glu	Gln
			20					25					30		

Val	Glu	Lys	Glu	Leu	Leu	Arg	Val	Ala	Gln	Xaa	Leu	Lys	Glu	Pro	Lys
		35					40					45			

Val	Ala	Ala	Ser	Val	Leu	Asn	Pro	Tyr	Val	Lys	Arg	Ser	Ile	Lys	Val
	50					55					60				

Lys	Ser	Leu	Xaa	Asp	Ile	Thr	Ala	Xaa	Glu	Arg	Xaa	Ser	Pro	Leu	His
65					70					75					80

Tyr	Gln	Pro	Xaa	Xaa	Phe	Ala	Cys
					85		

&lt;210&gt; 814

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (125)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

867

&lt;400&gt; 814

Ala Gly Ala Val Ile Ile Gly Phe Arg Ser Lys Ile Lys Asn Ala Leu  
1 5 10 15

Ala His Phe Leu Pro Gln Gly Thr Pro Thr Pro Leu Ile Pro Ile Leu  
20 25 30

Val Ile Ile Glu Thr Ile Ser Leu Leu Ile Gln Pro Ile Ala Leu Ala  
35 40 45

Val Arg Leu Thr Ala Asn Ile Thr Ala Gly His Leu Leu Met His Leu  
50 55 60

Ile Gly Ser Ala Thr Leu Ala Ile Ser Thr Ile Asn Leu Pro Ser Thr  
65 70 75 80

Leu Ile Ile Phe Thr Ile Leu Ile Leu Leu Thr Ile Leu Glu Ile Ala  
85 90 95

Val Ala Leu Ile Gln Ala Tyr Val Phe Thr Leu Leu Val Lys Pro Leu  
100 105 110

Pro Ala Arg Gln His Ile Lys Lys Lys Lys Lys Xaa Lys Gly Gly  
115 120 125

Ala Gly Xaa Gln Ser  
130

&lt;210&gt; 815

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

868

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (56)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (65)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (70)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 815  
 Trp Xaa Pro Arg Ala Ala Gly Ile Arg His Glu Val Ala Lys Met Val  
     1                    5                    10                    15  
 Lys Pro Lys Tyr Lys Gly Arg Xaa Thr Ile Asn Pro Ser Lys Ala Ser  
             20                    25                    30  
 Thr Asn Pro Xaa Arg Val Gln Gly Ala Xaa Gly Gln Asn Met Arg Asp  
             35                    40                    45  
 Arg Ala Thr Ile Arg Arg Leu Xaa Met Tyr Arg Gln Lys Glu Arg Arg  
             50                    55                    60  
 Xaa Ser Arg Gly Lys Xaa Ile Lys Pro Leu Gln Tyr Gln Ser Thr Val  
     65                    70                    75                    80  
 Ala Ser Gly Thr Val Ala Arg Val Glu Pro Asn Ile Lys Trp Phe Gly  
                     85                    90                    95  
 Asn Thr Arg Val Ile Lys Gln Ser Ser Leu Gln Lys Phe Gln  
             100                    105                    110

<210> 816  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 816  
 Lys Asn Ala Leu Glu Lys Tyr Gly Pro Leu Lys Pro Leu Pro Gln Thr

869

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      1             5             10             15
Pro His Leu Glu Glu Asp Leu Lys Glu Val Leu Arg Ser Glu Ala Gly
      20             25             30
Ile Glu Leu Ile Ile Glu Asp Asp Ile Arg Pro Glu Lys Gln Lys Arg
      35             40             45
Lys Pro Gly Leu Arg Arg Ser Pro Ile Lys Lys Val Arg Lys Ser Leu
      50             55             60
Ala Leu Asp Ile Val Asp Glu Asp Val Lys Leu Met Met Ser Thr Leu
      65             70             75             80
Pro Lys Ser Leu Ser Leu Pro Thr Thr Ala Pro Ser Asn Ser Ser Ser
      85             90             95
Leu Thr Leu Ser Gly Ile Lys Glu Asp Asn Ser Phe Ser Gln Ala His
      100            105            110
Val Arg Pro Gly Leu Ile Ser Asp Pro Ala
      115            120

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&lt;210&gt; 817

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 817

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Pro Glu Pro Pro Glu Ser Trp Ser Gly Val Arg Asp Gly Thr Thr His
  1             5             10             15
Pro Ala Met Cys Leu Gln Asp Leu Thr Ala Val Glu Ser Glu Phe Leu
      20             25             30
Ser Gln Phe Asn Met Thr Phe Pro Ser Ser Pro Pro Pro Ser Pro Cys
      35             40             45
Leu Leu Ser Ser Leu Val
      50

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&lt;210&gt; 818

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

870

<221> SITE  
<222> (10)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (24)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (27)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (33)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (37)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (45)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 818  
Ala Met Ile Ser Ile Gly Phe Leu Gly Xaa Ile Val Arg Ala His His  
1 5 10 15  
Ile Phe Thr Val Gly Ile Asp Xaa Asp Thr Xaa Ala Tyr Phe Thr Cys  
20 25 30  
Xaa Thr Ile Ile Xaa Xaa Ile Pro Lys Arg Gly Gln Xaa Asn  
35 40 45

<210> 819  
<211> 118  
<212> PRT  
<213> Homo sapiens



871

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (38)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (69)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (75)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (108)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 819  
 Lys Leu Pro Leu Lys Ala Lys Met Gly Lys Glu Lys Thr His Ile Asn  
   1                  5                  10                  15  
 Ile Val Val Ile Gly His Val Asp Ser Gly Lys Ser Thr Thr Thr Gly  
                   20                  25                  30  
 His Leu Thr Tyr Xaa Xaa Gly Gly Ile Asp Lys Arg Xaa Ile Glu Lys  
                   35                  40                  45  
 Phe Glu Lys Glu Ala Ala Glu Met Gly Lys Gly Ser Phe Lys Tyr Ala  
   50                  55                  60  
 Trp Val Leu Asp Xaa Leu Lys Ala Glu Arg Xaa Arg Gly Ile Thr Ile  
   65                  70                  75                  80  
 Asp Ile Ser Leu Trp Lys Phe Glu Thr Ser Lys Tyr Tyr Val Thr Ile  
                   85                  90                  95  
 Ile Asp Ala Pro Gly His Arg Asp Phe Ile Lys Xaa Met Ile Thr Gly  
                   100                  105                  110

872

Thr Ser Gln Ala Asp Cys  
115

&lt;210&gt; 820

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 820

Ile Leu Gly Phe Phe Glu Ile Ile Thr Val Cys Phe Pro Phe Val Ala  
1 5 10 15

Gly Asn Phe Trp Gly Arg Thr Leu Leu Leu Ser Ser Val Xaa Gln Thr  
20 25 30

Gln Pro Val Thr Met Val Leu Asp His Leu Cys Arg Asp Ser Thr Ser  
35 40 45

Phe Pro Ile Met Ile Cys Pro His Trp Arg Tyr Phe Thr Ser Val Ile  
50 55 60

Val Leu Ser Ser Leu Gly Ile Glu Ile Lys Ala Val Glu Tyr Met Asn  
65 70 75 80

&lt;210&gt; 821

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (56)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (64)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (70)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (81)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (82)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (98)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (99)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 821  
Thr Ile Gln Lys Gly Thr Lys Ala Trp Ser Ile His Arg Gly Gly Gly  
1 5 10 15  
Arg Ser Xaa Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser  
20 25 30  
Ala Gly Pro Glu Met Gln Thr Gly Arg Asn Asn Phe Val Xaa Arg Arg  
35 40 45  
Asn Pro Ala Asp Pro Gln Arg Xaa Pro Ser Asn Pro Ser His Arg Xaa  
50 55 60  
Gln Cys Ala Ala Gly Xaa Glu Gln Ser Glu His Asn Val Cys Gln Asp  
65 70 75 80

874

Xaa Xaa Glu Cys Thr Ala Gly Thr His Asn Cys Arg Ala Asp Gln Val  
85 90 95  
Cys Xaa Xaa Leu  
100

<210> 822  
<211> 163  
<212> PRT  
<213> Homo sapiens

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<220>  
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<222> (154)

876

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (155)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 822

Xaa	Gln	Xaa	Cys	Xaa	Asp	Gly	Thr	Asn	Pro	Gly	Xaa	Leu	Phe	Gln	Pro
1				5					10					15	

Pro	Thr	Asp	Pro	Pro	Ile	Ser	Ser	Pro	Leu	Ala	Thr	Ser	Gly	Thr	Ile
			20					25					30		

Phe	Ser	Xaa	Ile	Ser	Xaa	Phe	Trp	Asp	Leu	Xaa	Pro	Pro	Phe	Leu	Trp
		35					40					45			

Leu	Ala	Pro	Ser	Cys	Gln	Pro	Thr	Met	Ser	Ser	Gln	Ile	Arg	Gln	Asn
	50					55					60				

Tyr	Ser	Thr	Asp	Xaa	Glu	Ala	Thr	Val	Asn	Ser	Leu	Val	Xaa	Leu	Tyr
65					70					75					80

Leu	His	Ala	Ser	Tyr	Thr	Tyr	Leu	Ser	Leu	Gly	Phe	Tyr	Phe	Xaa	Xaa
				85					90					95	

Asp	Asp	Leu	Ala	Leu	Glu	Ser	Val	Ser	Xaa	Phe	Phe	His	Glu	Thr	Gly
			100					105					110		

Arg	Gly	Xaa	Arg	Xaa	Gly	Tyr	Glu	Arg	Leu	Leu	Asn	Met	Gln	Asn	Gln
		115					120					125			

Arg	Gly	Arg	Pro	Arg	Ser	Leu	Pro	Gly	Ser	Gln	Gln	Ala	Xaa	Leu	Xaa
	130					135					140				

Ile	Ile	Gly	Val	Lys	Thr	Pro	Lys	Xaa	Xaa	Xaa	Thr	Cys	His	Cys	Pro
145					150					155					160

Glu Asn Lys

&lt;210&gt; 823

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (5)

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<220>

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<220>

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<220>

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<222> (35)

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 823

Xaa	Gly	Thr	Ser	Xaa	Ser	Lys	Ala	Ser	Thr	Pro	Asn	Gly	Tyr	Asp	Asn
1				5					10					15	

Gly	Xaa	Ile	Trp	Xaa	Thr	Trp	Lys	Thr	Arg	Trp	Tyr	Xaa	Met	Lys	Lys
		20					25					30			

Thr	Thr	Xaa	Xaa	Ile	Ile	Pro	Phe	Asn	Arg	Leu	Thr	Ile	Xaa	Glu	Gly
		35				40					45				

Gln	Gln	His	His	Leu	Gly	Gly	Ala	Lys	Gln	Ala	Gly	Asp	Val
50					55						60		

878

<210> 824  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

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<220>  
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<400> 824  
 Glu Glu Ile Asn Leu Ala Pro Asp Ser Ser Ser Val Val Val Ser Xaa  
     1                    5                    10                    15  
 Leu Met Val Ala Thr Lys Tyr Glu Val Ser Val Tyr Ala Leu Lys Asp  
                     20                    25                    30  
 Thr Leu Thr Ser Arg Pro Ala Gln Gly Val Val Thr Thr Xaa Xaa Asn  
             35                    40                    45  
 Val Ser Pro Xaa Xaa  
             50

<210> 825  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens



879

&lt;400&gt; 825

Ser Arg Phe Thr Asp Asp Asp Lys Thr Asp His Leu Ser Trp Glu Trp  
1 5 10 15

Asn Leu Thr Ile Lys Lys Asp Trp Lys Asp  
20 25

&lt;210&gt; 826

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 826

Arg Ser Val Arg Ala Leu Leu Cys Thr Leu Arg Ala Val Pro Leu Pro  
1 5 10 15

Ala Ala Pro Cys Pro Pro Arg Pro Trp Gln Leu Gly Val Gly Ala Val  
20 25 30

Arg Thr Leu Arg Thr Gly Pro Ala Leu Leu Ser Val Arg Lys Phe Thr  
35 40 45

Xaa Lys His Glu Trp Val Asn Asn Arg Lys Trp His Trp Asn Ser Gly  
50 55 60

Asn Pro Ala Ile Leu His Arg Lys Arg Trp Glu Ile Leu Phe Ile Val  
65 70 75 80

Ile Ser Leu Lys Phe Gly Thr Lys Phe Glu Thr Asn Lys Leu Ile Leu  
85 90 95

Gly Cys Phe Trp Arg Val  
100

&lt;210&gt; 827

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

880

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (128)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 827

Pro	His	Ser	Arg	Ala	Leu	Leu	Thr	Pro	Asn	Arg	Ala	Pro	Lys	Lys	Lys
1				5				10					15		

Met	Ala	Ile	Ser	Gly	Val	Pro	Val	Leu	Gly	Phe	Phe	Ile	Ile	Ala	Val
			20					25					30		

Leu	Met	Ser	Ala	Gln	Glu	Ser	Trp	Ala	Ile	Lys	Glu	Glu	His	Val	Ile
		35					40					45			

Ile	Gln	Ala	Glu	Phe	Tyr	Leu	Asn	Pro	Asp	Gln	Ser	Gly	Glu	Phe	Met
	50						55				60				

Phe	Asp	Phe	Asp	Gly	Asp	Glu	Ile	Phe	His	Val	Asp	Met	Ala	Lys	Lys
65					70					75					80

Glu	Thr	Val	Trp	Arg	Leu	Glu	Glu	Phe	Gly	Arg	Phe	Ala	Ser	Phe	Xaa
				85					90					95	

Ala	Gln	Gly	Ala	Leu	Ala	Asn	Ile	Ala	Val	Asp	Lys	Ala	Asn	Leu	Glu
		100						105					110		

Ile	Met	Thr	Lys	Arg	Ser	Asn	Tyr	Thr	Pro	Ile	Thr	Asn	Val	Pro	Xaa
		115					120					125			

Glu	Val	Xaa	Cys	Ala	His	Xaa	Gln	Pro	Cys	Gly	Thr
	130					135					140

&lt;210&gt; 828

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

881

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 828

Arg	Xaa	Asp	Glu	Asn	Lys	Val	Asp	Gly	Met	Asn	Ala	Pro	Lys	Gly	Gln
1				5				10					15		

Thr	Gly	Asn	Ser	Ser	Arg	Gly	Pro	Gly	Asp	Gly	Gly	Asn	Arg	Asp	His
		20				25						30			

Trp	Lys	Glu	Ser	Asp	Arg	Lys	Asp	Gly	Lys	Lys	Asp	Gln	Asp	Ser	Arg
	35					40						45			

Ser	Ala	Pro	Glu	Pro	Lys	Lys	Pro	Glu	Glu	Asn	Pro	Ala	Ser	Lys	Phe
	50				55					60					

Ser	Ser	Ala	Ser	Lys	Tyr	Ala	Ala	Leu	Ser	Val	Asp	Gly	Glu	Asp	Glu
65				70					75					80	

Asn	Glu	Gly	Glu	Asp	Tyr	Ala	Glu
			85				

&lt;210&gt; 829

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (137)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (168)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (170)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (176)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

882

<220>  
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 <222> (183)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (185)  
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<220>  
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 <222> (190)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (196)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (210)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 829

Ile Leu Pro Gly Tyr Ile Asp Phe Thr Ala Asp Gln Val Asp Leu Thr  
 1 5 10 15

Ser Ala Leu Thr Lys Lys Ile Thr Leu Lys Thr Pro Leu Val Ser Ser  
 20 25 30

Pro Met Asp Thr Val Thr Glu Ala Gly Met Ala Ile Ala Met Ala Leu  
 35 40 45

Thr Gly Gly Ile Gly Phe Ile His His Asn Cys Thr Pro Glu Phe Gln  
 50 55 60

Ala Asn Glu Val Arg Lys Val Lys Lys Tyr Glu Gln Gly Phe Ile Thr  
 65 70 75 80

Asp Pro Val Val Leu Ser Pro Lys Asp Arg Val Arg Asp Val Phe Glu  
 85 90 95

Ala Lys Ala Arg His Gly Phe Cys Gly Ile Pro Ile Thr Asp Thr Gly

883

100					105					110					
Arg	Met	Gly	Ser	Arg	Leu	Val	Gly	Ile	Ile	Ser	Ser	Arg	Asp	Ile	Asp
	115						120					125			
Phe	Leu	Lys	Glu	Glu	Glu	His	Asp	Xaa	Phe	Leu	Glu	Glu	Ile	Met	Thr
	130					135					140				
Lys	Arg	Glu	Asp	Leu	Val	Val	Ala	Pro	Ala	Gly	Ile	Thr	Leu	Lys	Glu
	145					150					155				160
Ala	Asn	Glu	Ile	Leu	Gln	Arg	Xaa	Lys	Xaa	Gly	Lys	Val	Pro	Ile	Xaa
				165					170					175	
Asn	Glu	Met	Met	Ser	Leu	Xaa	Ala	Xaa	Trp	Pro	Asp	Arg	Xaa	Glu	Glu
		180						185					190		
Glu	Ser	Gly	Xaa	Pro	Leu	Ala	Ser	Lys	Met	Pro	Glu	Gln	Xaa	Trp	Val
		195					200					205			
Gly	Xaa	His	Gly	Thr	Met	Gly	Ala	Ser							
	210					215									

&lt;210&gt; 830

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

884

<221> SITE  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 830  
 Trp Lys Phe Pro Xaa Asp Thr Xaa Xaa Arg Tyr Ala Cys Arg Tyr Arg  
 1 5 10 15  
 Ser Gly Ile Pro Gly Ser Thr His Ala Ser Ala His Ala Ser Gly Ala  
 20 25 30  
 Ala Glu Thr Pro Pro Ala Trp His Leu Gly Ala Gln Arg Ser Pro Asp  
 35 40 45  
 Thr Ala Ala Ala Ala Met Glu Ser Glu Thr Glu Pro Glu Pro Xaa Thr  
 50 55 60  
 Leu Leu Xaa Lys Ser Pro Asn Gln Arg His Arg Asp Leu Glu Leu Ser  
 65 70 75 80  
 Gly Asp Arg Gly Trp Ser Val Gly His Leu Lys Ala His Leu Ser Arg  
 85 90 95  
 Xaa Tyr Pro Glu Arg Xaa Arg  
 100

<210> 831  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (60)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 831  
 Asn Pro Ser Ser Ser Tyr Arg Ser Ala Arg Val Gly Gly Met Ser Val  
 1 5 10 15

885

Ala Cys Val Leu Lys Arg Lys Ala Val Leu Trp Gln Asp Ser Phe Ser  
                   20                  25                  30

Pro His Leu Lys His His Pro Gln Glu Pro Ala Asn Pro Asn Met Pro  
                   35                  40                  45

Val Val Leu Thr Ser Gly Thr Gly Ser Gln Ala Xaa His Asn Gln Leu  
           50                  55                  60

Gln Ile Arg Leu Leu Gln Leu Gly Leu Thr Pro Ala Leu Ser Gln Asp  
   65                  70                  75                  80

Leu

<210> 832  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 832  
 Lys Arg Ser Leu Met Thr Arg Gly Leu Ser Leu Ala Leu Ala Val Val  
   1                  5                  10                  15

Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg  
                   20                  25                  30

Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu Glu Ala  
           35                  40                  45

Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp  
   50                  55                  60

Arg Leu Met Arg Tyr Phe Leu Leu Thr His Leu Cys Gly Ile Ser His  
   65                  70                  75                  80

Arg Ile Trp Cys Thr Leu Ser Thr Ile Cys Ser Asp Ala Ala  
                   85                  90

<210> 833  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

<400> 833  
 Gly Asp Arg Gly Pro Gly Leu Cys Leu His Arg Gln Val Pro Glu His

886

```

      1             5             10             15
Leu Gly Pro Asp Phe Gly His Leu His Asp His Ser Ala His His His
      20             25             30
Pro Ser Val Gly Arg Pro Gly Pro Ala Ile Asp Gln Glu Ala Ser Leu
      35             40             45
Arg Pro Gly Ala Leu Pro Val Thr Cys Ile Pro Arg Thr Leu Ser Ser
      50             55             60
Ile Pro Arg Pro Ala Pro Arg Gly Gln Glu Leu Cys Pro
      65             70             75

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&lt;210&gt; 834

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 834

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Phe Arg Phe Ile Asn Ala Arg Arg Arg Ile Val Gln Pro Met Ile Asp
  1             5             10             15
Gln Ser Asn Arg Ala Val Ser Gln Gly Ala Ala Tyr Ser Pro Glu Gly
      20             25             30
Gln Pro Met Gly Ser Phe Val Leu Asp Gly Gln Gln His Met Gly Ile
      35             40             45
Arg Pro Ala Gly Leu Gln Ser Met Pro Gly Asp Tyr Val Ser Gln Gly
      50             55             60
Gly Pro Met Gly Met Ser Met Ala Gln Pro Ser Tyr Thr Pro Pro Gln
      65             70             75             80
Met Thr Pro His Pro Thr Gln Leu Arg His Gly Pro Pro Met His Ser
      85             90             95
Tyr Leu Pro Ser His Pro His His Pro Ala Met Met Met His Gly Gly
      100             105             110
Pro Pro Thr His Pro Gly Met Thr Met Ser Ala Gln Ser Pro Thr Met
      115             120             125
Leu Asn Ser Val Asp Pro Asn Val Gly Gly Gln Val Met Asp Ile His
      130             135             140
Ala Gln
145

```



887

&lt;210&gt; 835

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (95)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 835

Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe

1

5

10

15

Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln

20

25

30

Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr

35

40

45

Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Glu Glu Gln Arg

50

55

60

Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu

65

70

75

80

Arg Trp Glu Leu Ser Ser Gln Pro Thr Ile Pro Ile Val Gly Xaa Ile

85

90

95

Ala Gly Leu Val Leu Leu Gly Leu

100

&lt;210&gt; 836

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

888

&lt;400&gt; 836

Gly Gly Trp Thr Gln Arg Arg Leu Ser Pro Pro Gly His Ser Glu Ser  
1 5 10 15

Ala Gln Ser Lys Met Leu Ser Gly Ile Gly Gly Phe Val Leu Gly Ser  
20 25 30

Ser Ser Ser Gly Trp Ala Tyr Tyr Pro Ser Xaa Asp Gln Lys Xaa Leu  
35 40 45

Leu His  
50

&lt;210&gt; 837

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (28)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

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<220>  
<221> SITE  
<222> (49)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (59)  
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 837  
Xaa Arg Ser Ser Leu Xaa Thr Ile Asn Tyr Asn Glu Phe Pro Thr Met  
1 5 10 15

Val Phe Pro Ser Gly Gln Ile Ser Xaa Gly Ser Xaa Leu Ala Pro Ala  
20 25 30

Pro Pro Gln Val Pro Ala Pro Gly Ser Ser Pro Cys Pro Xaa Xaa Gln  
35 40 45

Xaa Trp Tyr Gln Leu Trp Pro Arg Pro Gln Xaa Leu Cys Pro  
50 55 60

```
<210> 838
<211> 105
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (95)
<223> xaa equals any of the naturally occurring L-amino acids
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<220>  
<221> SITE  
<222> (100)  
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 838  
His Glu Leu Thr Ala Lys Tyr Leu Asn Tyr Tyr Arg Gly Met Leu Asp  
1 5 10 15

Val Ala His Glu Gln Val Asp Phe Lys Asp Phe Tyr Pro Ala Ile Ala  
20 25 30

890

Val Asn Asp Val Arg Gln Ala Ala Arg Ser Ala Ala Ser Tyr Met Leu  
                   35                                  40                                  45

Phe Asp Pro Lys Asp Ser Val Met Gln Gln Asn Leu Val Tyr Tyr Arg  
                   50                                  55                                  60

Phe His Arg Ala Arg Trp Gly Leu Glu Glu Glu Asp Phe Gln Pro Arg  
                   65                                  70                                  75                                  80

Glu Glu Ala Met Leu Tyr His Asn Gln Thr Ala Glu Leu Arg Xaa Cys  
                                   85                                  90                                  95

Trp Ser Ser Xaa Thr Cys Thr Cys Xaa  
                   100                                  105

&lt;210&gt; 839

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 839

Pro Asp Arg Pro Trp Ala Lys Pro Glu Asp Pro Ser Leu Leu Glu Asp  
   1                                  5                                  10                                  15

Pro Arg Ile Lys Ala Ile Ala Ala Lys His Asn Lys Thr Thr Ala Gln  
                   20                                  25                                  30

Val Leu Ile Arg Phe Pro Met Gln Arg Asn Gly Gly Gly Ser Pro Ser  
                   35                                  40                                  45

Leu

&lt;210&gt; 840

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

891

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (95)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 840

Ser Lys Gly Ile Arg Asp Asn Glu Arg Ser Gly Arg Ala Arg Val His  
1 5 10 15

Val Ser Glu Glu Gly Thr Glu Pro Glu Ala Met Leu Gln Val Leu Gly  
20 25 30

Pro Lys Pro Ala Leu Pro Ala Gly Thr Xaa Asp Thr Ala Lys Glu Asp  
35 40 45

Ala Ala Asn Arg Xaa Leu Ala Lys Leu Tyr Lys Val Ser Asn Gly Ala  
50 55 60

Trp Thr Met Ser Val Ser Leu Leu Ala Asp Glu Asn Pro Ser Ala Lys  
65 70 75 80

Gly Pro Glu Ile Gln Lys Thr Ala Ser Ser Trp Thr Thr Gln Xaa Xaa  
85 90 95

Lys Ser Leu Ser  
100

<210> 841

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 841

Gly Asn Gly Gly Arg Asp Phe Val Arg Arg Asp Leu Ala Ile Arg Asp  
1 5 10 15

Thr Phe Val Asn Ala Ser Arg Thr Leu Tyr Ser Ser Ser Pro Arg Val

892

	20		25		30	
Leu	Ser	Asn	Asn	Ser	Asp	Ala
	35		40		45	
Asn	Leu	Glu	Leu	Ile	Asn	Thr
						Trp
						Val
Ala	Lys	Asn	Thr	Asn	Asn	Lys
	50				55	
Ile	Ser	Arg	Leu	Leu	Asp	Ser
						Leu
						Xaa
Ser	Asp	Thr	Arg	Leu	Val	Leu
	65				70	
Leu	Leu	Asn	Ala	Ile	Leu	Pro
						Glu
						Cys
						Gln
						80
Val	Glu	Asp	Asn	Ile		
						85

&lt;210&gt; 842

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (42)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (50)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (63)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (74)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (77)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 842  
Xaa Thr Asn Met Ala Phe Ser Pro Phe Xaa Ile Ala Ser Xaa Leu Thr  
1 5 10 15  
Xaa Val Leu Leu Gly Xaa Gly Asp Asn Thr Lys Thr Asn Leu Glu Ser  
20 25 30  
Xaa Leu Ser Tyr Pro Xaa Asp Phe Thr Xaa Val His Gln Ala Leu Lys  
35 40 45  
Gly Xaa Thr Thr Lys Gly Val Thr Ser Val Ser Gln Ile Phe Xaa Cys  
50 55 60  
Pro Glu Leu Ala Ile Arg Asp Pro Leu Xaa Asn Ala Xaa Arg Thr Leu  
65 70 75 80  
Phe

894

<210> 843  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (97)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (98)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (111)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (117)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 843  
 Gly Thr Ser Lys Ala Gln Asp Gly Thr Phe Ser Ser Val Leu Thr Leu  
   1                  5                  10                  15  
 Thr Asn Leu Thr Gly Leu Asp Thr Gly Glu Tyr Phe Cys Thr His Asn  
                   20                  25                  30  
 Asp Ser Arg Gly Leu Glu Thr Asp Glu Arg Lys Arg Leu Tyr Ile Phe  
           35                  40                  45  
 Val Pro Glu Ala Thr Ser Ala Lys Pro Pro Leu Gly Thr Gly Arg Trp  
   50                  55                  60  
 Ile Leu Met Pro Thr Met Ser Thr Asp Ser Arg Val Ser Pro Leu Ser  
   65                  70                  75                  80  
 Gly Leu Met Leu Ser Arg Val Phe Ile His Gln Arg Leu Cys Gly Thr  
                   85                  90                  95  
 Xaa Xaa Gly Leu Trp Ser Ala Arg Trp Arg Thr Ser Pro Ser Xaa Ala  
           100                  105                  110  
 Leu Trp Ile Gly Xaa Glu Val Ser Ile  
   115                  120



895

<210> 844  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (12)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (127)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (131)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (135)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 844  
 Xaa Arg Ala Gly Leu Gly Pro Gly Pro Trp Ala Xaa Pro His Ser Pro  
           1                  5                  10                  15  
 Trp Arg Ser Trp Arg Pro Leu Gln Ser Pro Lys Gly Leu Gly Arg Ser  
                   20                  25                  30  
 Trp Ala Val Arg Val Ser Arg Cys Pro Met Thr Lys Thr Phe Ala Ala  
           35                  40                  45  
 Ser Gly Gln Thr Gly Tyr Leu Ile Gln Ser Thr Gly Pro Lys Ser Cys  
           50                  55                  60  
 Val Ile Thr Tyr Leu Ala Gln Val Asp Pro Lys Gly Ser Leu Pro Lys  
           65                  70                  75                  80  
 Trp Val Val Asn Lys Ser Ser Gln Phe Leu Ala Pro Lys Ala Met Lys  
                   85                  90                  95  
 Lys Met Tyr Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys His

896

100	105	110
Leu Pro His Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Xaa Pro		
115	120	125
Ser Leu Xaa Leu Arg Ser Xaa Arg		
130	135	

<210> 845  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 845
Pro Lys Gln Leu Glu Ala Leu Cys Val Gly Ala Ala Thr Gly Pro Arg
1 5 10 15
Ala Met Trp Leu Cys Pro Leu Ala Leu Asn Leu Ile Leu Met Ala Ala
20 25 30
Ser Gly Ala Val Cys Glu Val Lys Asp Val Cys Val Gly Ser Pro Gly
35 40 45
Ile Pro Gly Thr Pro Gly Ser His Gly Leu Pro Gly Arg Asp Gly Arg
50 55 60
Asp Gly Val Lys Gly Asp Pro Gly Pro Pro Gly Pro Met Gly Pro Pro
65 70 75 80
Gly Glu Met Pro Cys Pro Pro Gly Asn Asp Gly Leu Pro Gly Ala Pro
85 90 95
Gly Ile Pro Gly Glu Cys Gly Glu Lys Gly Glu Pro Gly Glu Arg Gly
100 105 110
Pro Pro Gly Leu Pro Ala His Leu Asp Glu Glu Leu Gln Ala Thr Leu
115 120 125
His Asp Phe Arg His Gln Ile Leu Gln Thr Arg Gly Ala Leu Ser Leu
130 135 140

Gln  
 145

<210> 846  
 <211> 61  
 <212> PRT

897

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (45)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 846

Lys	Leu	Pro	Leu	Lys	Ala	Lys	Met	Gly	Lys	Glu	Lys	Thr	His	Ile	Asn
1				5					10					15	

Ile	Val	Val	Ile	Gly	His	Val	Asn	Ser	Gly	Lys	Ser	Thr	Thr	Thr	Gly
			20					25					30		

His	Leu	Ile	Tyr	Ile	Cys	Gly	Gly	Phe	Xaa	Lys	Lys	Xaa	Phe	Glu	Xaa
		35					40					45			

Phe	Glu	Lys	Glu	Ala	Ala	Xaa	Met	Gly	Lys	Gly	Ser	Ser
	50					55					60	

&lt;210&gt; 847

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (72)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 847

Val	Gln	Pro	Ala	Leu	Ala	His	Arg	Ala	Val	Arg	Asp	Leu	Arg	Ala	Ala
1				5					10				15		

898

Cys Arg Gln Gly Ile Cys Gln Arg Leu Arg Ser Pro Glu Pro Pro Glu  
                   20                                  25                                  30  
 Leu Gln His His Val Ile Trp Asp Leu Pro Gly Arg Gly Gly Gly Gly  
                   35                                  40                                  45  
 Gly Phe Leu Arg Pro Pro His Leu Met Pro Thr Pro Cys Pro Ala Arg  
                   50                                  55                                  60  
 His Gly Arg Gly Leu Glu Ala Xaa Glu Lys  
                   65                                  70

<210> 848  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 848  
 Leu Xaa Xaa Xaa Glu Ala Ala Met Phe His Arg Lys Leu Phe Glu Glu  
   1                                  5                                  10                                  15

Leu Val Arg Ala Ser Ser His Ser Thr Asp Leu Met Glu Ala Met Ala  
                   20                                  25                                  30

Met Gly Ser Val Glu Ala Ser Tyr  
                   35                                  40

<210> 849  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

899

<220>  
 <221> SITE  
 <222> (113)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (116)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (118)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 849  
 Glu Glu Leu Gln Val Asp Phe Leu Asp His Val Pro Leu Thr Thr His  
     1                    5                    10                    15  
 Asn Phe Ala Arg Lys Thr Phe Leu Lys Leu Ala Phe Cys Asp Ile Cys  
             20                    25                    30  
 Gln Lys Phe Leu Leu Asn Gly Phe Arg Cys Gln Thr Cys Gly Tyr Lys  
     35                    40                    45  
 Phe His Glu His Cys Ser Thr Lys Val Pro Thr Met Cys Val Asp Trp  
     50                    55                    60  
 Ser Asn Ile Arg Gln Leu Leu Leu Phe Pro Asn Ser Thr Ile Gly Asp  
     65                    70                    75                    80  
 Ser Gly Val Pro Ala Leu Pro Ser Leu Thr Met Arg Arg Met Arg Glu  
             85                    90                    95  
 Ser Val Pro Arg Met Pro Val Ser Ser Gln His Arg Tyr Ser Thr Pro  
             100                    105                    110  
 Xaa Ala Phe Xaa Phe Xaa Thr Ser Ser Pro Ser Ser Xaa  
             115                    120                    125

<210> 850  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

900

<220>  
<221> SITE  
<222> (18)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (24)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (44)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (49)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 850  
Pro Asp Arg Arg Arg Ala Ala Ile Met Asp Thr Ser Arg Val Gln Pro  
1 5 10 15  
Ile Xaa Leu Ala Arg Val Thr Xaa Val Leu Gly Arg Thr Gly Ser Gln  
20 25 30  
Gly Gln Cys Thr Gln Val Ile Gly Trp Gly His Xaa Ala Asp Cys Arg  
35 40 45  
Xaa Pro Lys Pro  
50

<210> 851  
<211> 108  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (71)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (89)  
<223> Xaa equals any of the naturally occurring L-amino acids

901

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (98)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 851

Pro	Thr	Arg	Pro	Leu	Pro	Ala	Pro	Pro	Leu	Val	Ser	Ser	Lys	Met	Ala
1				5					10					15	

Ser	Gly	Gly	Ser	Gly	Gly	Val	Ser	Val	Pro	Ala	Leu	Trp	Ser	Glu	Val
			20					25					30		

Asn	Arg	Tyr	Gly	Gln	Asn	Gly	Asp	Phe	Thr	Arg	Ala	Leu	Lys	Thr	Val
		35					40						45		

Asn	Lys	Ile	Leu	Gln	Ile	Asn	Lys	Asp	Asp	Val	Thr	Ala	Leu	His	Cys
	50						55				60				

Lys	Val	Val	Cys	Leu	Ile	Xaa	Asn	Gly	Ser	Phe	Lys	Glu	Ala	Leu	Asn
65					70					75					80

Val	Ile	Asn	Thr	His	Thr	Lys	Val	Xaa	Ala	Asn	Asn	Ser	Leu	Ser	Phe
				85					90					95	

Glu	Xaa	Ala	Tyr	Cys	Glu	Tyr	Arg	Leu	Lys	Gln	Asn
			100						105		

&lt;210&gt; 852

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (82)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

902

&lt;222&gt; (86)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (91)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (97)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 852

Ser	Trp	Arg	Leu	Cys	Val	Trp	Val	Ala	Asp	Phe	Leu	Glu	Pro	Glu	Lys
1				5					10					15	
Lys	Val	Thr	Gly	His	Met	Arg	Asp	Arg	Trp	Ser	Glu	Ser	Val	Thr	Gly
			20					25					30		
Ala	Ala	Thr	Gly	Pro	Arg	Ala	Met	Trp	Leu	Cys	Pro	Leu	Ala	Leu	Asn
			35				40					45			
Leu	Ile	Leu	Met	Ala	Ala	Ser	Gly	Ala	Ala	Cys	Glu	Val	Lys	Asp	Val
	50					55					60				
Cys	Val	Gly	Ser	Pro	Gly	Ile	Pro	Gly	Xaa	Pro	Gly	Ser	His	Gly	Leu
	65				70				75						80
Pro	Xaa	Xaa	Glu	Gly	Xaa	Asn	Gly	Val	Lys	Xaa	Asp	Pro	Gly	Pro	Pro
				85					90					95	
Xaa	Pro	Met	Gly	Pro	Pro										
			100												

&lt;210&gt; 853

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 853

Asn	Leu	Met	Gly	Arg	Tyr	Gly	Asp	Asn	Asn	His	Ser	Gln	Gly	Val	Asn
1				5					10					15	
Trp	Phe	His	Trp	Lys	Gly	His	Glu	His	Ser	Ile	Gln	Phe	Ala	Glu	Met
			20					25					30		
Lys	Leu	Arg	Pro	Ser	Asn	Phe	Arg	Asn	Leu	Glu	Gly	Arg	Arg	Lys	Arg
		35					40					45			



Ala

<210> 854  
<211> 130  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (66)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (70)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (73)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (118)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (128)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (129)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (130)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 854  
Leu Ser Ala Met Arg Phe Leu Ala Ala Thr Phe Leu Leu Leu Ala Leu  
1 5 10 15

Ser Thr Ala Ala Gln Ala Glu Pro Val Gln Phe Lys Asp Cys Gly Ser

904

20							25					30				
Val	Asp	Gly	Val	Ile	Lys	Glu	Val	Asn	Val	Ser	Pro	Cys	Pro	Thr	Gln	
35							40			45						
Pro	Cys	Gln	Leu	Ser	Lys	Gly	Gln	Ser	Tyr	Ser	Val	Asn	Val	Thr	Phe	
50			55				60									
Thr	Xaa	Asn	Ile	Gln	Xaa	Lys	Ser	Xaa	Lys	Ala	Val	Val	His	Gly	Ile	
65		70				75					80					
Leu	Met	Gly	Val	Pro	Val	Pro	Phe	Pro	Ile	Pro	Glu	Pro	Asp	Gly	Cys	
85				90					95							
Lys	Ser	Gly	Ile	Asn	Cys	Pro	Ile	Gln	Lys	Asp	Lys	Thr	Tyr	Ser	Tyr	
100			105				110									
Leu	Asn	Lys	Leu	Pro	Xaa	Lys	Ser	Glu	Tyr	Pro	Ser	Ile	Lys	Leu	Xaa	
115		120				125										
Xaa	Xaa															
130																

```
<210> 855
<211> 173
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (159)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<220>  
<221> SITE  
<222> (168)  
<223> Xaa equals any of the naturally occurring L-amino acids
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```

<400> 855
Phe Ile Phe Thr Lys Trp Leu Gln Asp Val Phe Asn Val Pro Leu Val
  1             5             10             15

Ile Gln Met Thr Asp Asp Glu Lys Tyr Leu Trp Lys Asp Leu Thr Leu
          20             25             30

Asp Gln Ala Tyr Ser Tyr Ala Val Glu Asn Ala Lys Asp Ile Ile Ala
          35             40             45

Cys Gly Phe Asp Ile Asn Lys Thr Phe Ile Phe Ser Asp Leu Asp Tyr

```

905

50	55	60
Met Gly Met Ser Ser Gly Phe Tyr Lys Asn Val Val Lys Ile Gln Lys		
65	70	75 80
His Val Thr Phe Asn Gln Val Lys Gly Ile Phe Gly Phe Thr Asp Ser		
	85	90 95
Asp Cys Ile Gly Lys Ile Ser Phe Pro Ala Ile Gln Ala Ala Pro Ser		
	100	105 110
Phe Ser Asn Ser Phe Pro Gln Ile Phe Arg Asp Arg Thr Asp Ile Gln		
	115	120 125
Cys Leu Ile Pro Cys Ala Ile Asp Gln Asp Pro Tyr Phe Arg Met Thr		
	130	135 140
Arg Asp Val Ala Pro Arg Ile Gly Tyr Pro Lys Pro Ala Leu Xaa Thr		
	145	150 155 160
Pro Pro Ser Ser Gln Pro Cys Xaa Ala Pro Arg Pro Lys		
	165	170

&lt;210&gt; 856

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (79)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

<221> SITE  
<222> (84)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (88)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (92)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (96)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<222> (99)  
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<222> (125)  
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<220>  
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<400> 856  
Ala His Cys Leu Gln Glu Ser Arg Glu Phe Gln Gly Lys Val Arg Ser  
1 5 10 15  
Gln Asp Pro Arg Glu Xaa Gly Gly Thr His Arg Leu Pro Gly His Gly  
20 25 30

907

Gly Arg Pro His Leu Arg Pro Xaa Leu Leu Pro Pro Gly Ala Thr Ala  
35 40 45

Ser Ala Leu Gln Leu Met Met Arg Thr Arg Ile Ala Ala Gln Val Ser  
50 55 60

Arg Phe Ala Ala Ile Leu Leu Gly Leu Gly Val His Ala Met Xaa Phe  
65 70 75 80

Ser Asn Xaa Xaa Pro Gly Leu Xaa Leu Lys Ser Xaa Gln Lys Trp Xaa  
85 90 95

Pro Lys Xaa Arg Glu Gln Thr Met Gly Pro Thr Xaa Gly Phe Ile Pro  
100 105 110

Ser Phe Leu Leu Lys Gly Pro Xaa Phe Val Gly Glu Xaa Ile Glu Pro  
115 120 125

Leu Cys Asn Val Asn Glu Asn Phe Xaa Lys Ile  
130 135

&lt;210&gt; 857

&lt;211&gt; 30

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 857

Leu	Val	Xaa	Xaa	Ser	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe
1				5				10					15		
Phe	Phe	Phe	Lys	Lys	Xaa	Lys	Lys	Lys	Lys	Xaa	Gly	Lys	Xaa		
			20					25					30		

<210> 858

<211> 58

<212> PRT

<213> Homo sapiens

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<222> (7)

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<220>

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<220>

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<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

909

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 858

Cys	Trp	Asn	Gln	Cys	Phe	Xaa	His	Val	Phe	Asn	Ser	Leu	Val	Tyr	Gly
1				5					10					15	

Xaa	Pro	Xaa	Gln	Met	Tyr	Leu	Asn	Lys	Gln	Lys	Pro	Phe	Lys	Lys	Lys
			20					25					30		

Lys	Lys	Asn	Pro	Gly	Gly	Gly	Ala	Arg	Xaa	Pro	Ile	Pro	Pro	Lys	Xaa
		35					40					45			

Gly	Xaa	Xaa	Xaa	His	Ser	Arg	Ala	Gly	Val
	50					55			

&lt;210&gt; 859

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>  
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<222> (41)  
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<220>  
<221> SITE  
<222> (52)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 859  
Xaa Xaa Xaa Xaa Xaa Asn Pro Asn Xaa Xaa Pro Xaa Xaa Gly Met Leu



911

1                    5                    10                    15  
Ile Xaa Glu Xaa Val Lys Lys Val Lys Gly Asn Ser Gly Lys Ser Xaa  
                  20                    25                    30  
Pro Ala Xaa Leu Pro Lys Thr Ser Xaa Leu Ala Ser Pro Val Leu Glu  
                  35                    40                    45  
Ala Pro Ala Xaa Pro Val Asp Thr Cys Leu Thr Gly Arg Gly Tyr Pro  
                  50                    55                    60  
Asn Arg Gly Lys Gly  
65

&lt;210&gt; 860

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (28)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

912

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 860

Xaa Ala Leu Gly Asn Arg Phe Gly Ala Gly Xaa Gly Arg Arg Leu Trp  
1 5 10 15

Phe Trp Lys Val Val Pro Val Val Asp Leu Val Xaa Ala Gly Gly Val  
20 25 30

Val Val Xaa Leu Xaa Leu Val Ala Xaa Cys Val Leu Glu Val Xaa Ser  
35 40 45

&lt;210&gt; 861

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (23)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

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 <400> 861  
 Asp Ile Leu Gln Leu Trp Asp Trp Cys Leu Thr Val Xaa Tyr Cys His  
   1                  5                  10                  15  
 Val Asn Val Val Tyr Asp Xaa Lys Xaa Tyr Val Thr Lys Asp Phe Tyr  
                   20                  25                  30  
 Ser Asp Xaa Phe Ile Ile Lys Gly His Met Arg Leu Val Glu Thr Xaa  
           35                  40                  45  
 Phe Val Val Lys Xaa Xaa Xaa Xaa Asn Phe Cys Thr  
       50                  55                  60  
  
 <210> 862  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (31)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (40)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 862  
 Asp Gly Ala Leu Leu Ile Pro His Gln Asp Glu Gln Ser Trp Pro Ser

914

1	5	10	15
Ile Met Thr Glu Arg Gly Arg Leu Arg Gly Ser Pro Asp Cys Xaa Glu			
20	25	30	
Leu Arg Thr Gln Trp Arg Phe Xaa Gly Thr Leu Arg Ser Leu Trp Gln			
35	40	45	
Ala Trp Ser Gly Ser Pro			
50			

&lt;210&gt; 863

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (23)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (45)

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 863

Pro	Trp	Leu	Arg	His	Glu	Met	Glu	Pro	Leu	Ile	Xaa	Ile	Trp	Ser	Ser
1				5					10					15	

Ser	Leu	Ile	Thr	Asp	Gly	Xaa	Ile	Arg	Val	Trp	Val	Glu	Xaa	Leu	Xaa
			20					25					30		

Xaa	Lys	Lys	Gly	Cys	Phe	Trp	Ser	Xaa	Val	Phe	Phe	Xaa	Thr	Ser	Ala
		35					40					45			

Leu	Gly	Gly	Ile	Trp	Gln	Ile	Xaa	Arg	Xaa	Arg	Phe	Gly	Glu	Leu
	50					55					60			

<210> 864

<211> 78

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (11)

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<221> SITE

<222> (14)

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<223> Xaa equals any of the naturally occurring L-amino acids

917

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<220>  
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 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 864  
 Ile Arg Xaa Xaa Gln Arg Pro Lys Gln Leu Xaa Gly Arg Xaa Cys Xaa  
 1 5 10 15  
 Ser Xaa Asp Phe Leu Glu Pro Glu Lys Lys Xaa Glu Xaa Xaa Leu Val  
 20 25 30  
 Pro Xaa Xaa Met Trp Leu Cys Pro Ala Gly Pro Xaa Thr Xaa Ser Cys  
 35 40 45  
 Xaa Gly Xaa Phe Trp Cys Cys Val Arg Xaa Xaa Gly Thr Phe Gly Xaa  
 50 55 60  
 Gly Ser Pro Xaa Ile Pro Gly Thr Pro Gly Ser His Gly Leu  
 65 70 75

<210> 865  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<220>  
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (30)

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<221> SITE

<222> (31)

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<221> SITE

<222> (37)

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<220>

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<222> (45)

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<220>

<221> SITE

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<220>

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<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids



919

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 865

Ser Ile Asp Leu Val Asp Asn Thr Pro Ser Pro Pro Leu Arg Arg Cys  
 1 5 10 15

Phe Val Ile Xaa Xaa Pro Pro Thr Pro Arg Ala Glu Pro Xaa Xaa Pro  
 20 25 30

Phe Glu Glu Gly Xaa Leu Val Ile Leu Leu Cys Gly Xaa Trp Arg Asn  
 35 40 45

Val Xaa Xaa Val Lys Xaa Ala Ser Xaa Leu Gly Pro Xaa Xaa Ile Gly  
 50 55 60

Leu Val Lys  
 65

&lt;210&gt; 866

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 866

Ile Tyr Ala Val Val Ala Thr Asn Arg Pro Met Ile Xaa Leu Ala Gly  
 1 5 10 15

Gln Val Phe Ser Arg Ala Lys Ser Pro Ser Gly Pro Leu Ala Gly Lys  
 20 25 30

Ala Ser Arg Ser Ala Leu Ser Cys Gln Thr Ser Gly Arg Ile Pro Gly  
 35 40 45

Arg Gln Lys Pro Leu His Leu Leu Cys Arg Thr Leu His Phe Pro Asn  
 50 55 60

Pro Pro Gln Val Gly Arg Ala Glu Gly Ala Ser Ala Ser Leu Asp  
 65 70 75

<210> 867  
<211> 116  
<212> PRT  
<213> Homo sapiens

<220>  
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<220>  
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<222> (110)  
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921

&lt;400&gt; 867

```

Thr Gly Thr Ser Leu Met Cys Pro Cys Pro Ser Asp Asp Ser Trp Gly
  1              5              10              15

Ser Gly Gly Gly Glu Ser Pro Arg Thr Arg Ala Val Ala Phe Pro Gln
      20              25              30

Leu Leu Arg Leu Pro Ala Phe Pro Ala Glu Thr Ala Arg Pro Val Gly
      35              40              45

Trp Arg Gly Arg Pro Gly Leu Gln Thr Thr Ser Ala Ile Thr Trp Leu
      50              55              60

Xaa Val Pro Lys Gln Asp Ile His Thr Val Pro Leu Xaa Pro Ser Ser
      65              70              75              80

Ser Xaa Lys Xaa Lys Gly Lys Ala Lys Leu Lys Xaa Leu Leu Gly Pro
      85              90              95

Trp Leu Xaa Ser Phe Phe Pro Xaa Pro Xaa Ala Leu Pro Xaa Ala Arg
      100              105              110

Leu Lys Lys Thr
      115

```

&lt;210&gt; 868

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

922

&lt;400&gt; 868

Pro Ser Phe Leu Lys Pro Arg Cys Val Pro Gln Leu Gln Arg Val Gly  
1 5 10 15  
Met Gly Ile Thr Leu Asn Cys Gly Lys Ala Glu Trp Lys Xaa Gln Phe  
20 25 30  
His Arg Xaa Lys Gln Leu Leu Gly Xaa Tyr Ser Val Pro Arg Xaa Arg  
35 40 45  
Glu Asn Phe Leu Gly Lys Tyr Phe Val  
50 55

&lt;210&gt; 869

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 869

Pro Leu Tyr Leu Leu His Asn Glu Leu Thr Arg Asn Asn Phe Ala Arg  
1 5 10 15  
Arg Ala Lys Ala Lys Thr Pro Glu Thr Arg Arg Ala Thr Xaa Glu Thr  
20 25 30  
Ala Xaa Arg Ala His Pro Ser Met  
35 40

&lt;210&gt; 870

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

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<220>

<221> SITE

<222> (16)

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<222> (20)

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<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 870

Val	Asn	Val	Thr	Tyr	Xaa	Gln	Phe	Ser	Leu	Phe	Glu	Tyr	Arg	Met	Xaa
1					5				10					15	

Thr	Leu	His	Xaa	Xaa	Ile	Xaa	Arg	Ala	Trp	Gly	Ile	Leu	Pro	Met	Asn
			20				25							30	

Phe	Leu	Gln	Ala	His	Leu
					35

<210> 871

<211> 95

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 871

Ala	Lys	Leu	Phe	Gly	Lys	Val	Leu	Pro	Thr	Ala	Pro	Val	Arg	Val	Ile
1				5					10					15	

Leu	Ala	Pro	Leu	Arg	Lys	Gly	Val	Arg	Val	Ser	Val	Pro	Pro	Ala	Thr
			20					25						30	

924

Pro	Pro	Ala	Phe	Pro	Ser	Leu	Pro	Ile	Ser	Leu	Pro	Gln	Gly	Pro	Glu
		35					40					45			
Leu	Pro	Pro	Asp	Trp	Arg	Ala	Ser	Pro	Ala	Gln	Pro	Arg	His	Arg	Pro
	50					55					60				
Pro	Ser	Gly	Pro	Pro	Val	Ala	Arg	Phe	Pro	Gly	Phe	Ile	Pro	Gln	Pro
	65				70					75					80
Leu	Leu	Xaa	Pro	Phe	Ile	Pro	Ile	Ser	Tyr	Cys	Tyr	Cys	Cys	Glu	
				85				90						95	

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<210> 872
<211> 30
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (26)
<223> xaa equals any of the naturally occurring L-amino acids
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<400> 872
Ala Gln Trp Gln Cys Ser Glu Xaa Arg Phe Ser Pro Pro Val Ser Ala
 1              5              10              15
Val Thr Ala Leu Gly Phe Ser Arg Xaa Xaa Phe Leu Ile Leu
      20              25              30

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```
<210> 873
<211> 76
<212> PRT
<213> Homo sapiens
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<400> 873  
Thr Lys Ile Leu Gln Ile Val Pro His Glu Tyr Pro Pro Ser Ser Ala  
1 5 10 15

925

Ile Leu Gln Ser Gly Asn Arg Trp Val Glu Ala Ala Gln Val Asn Tyr  
20 25 30  
Pro Ala Cys Leu Ser Ile His Ser Ser Ser Ser Ser Gln Arg Leu Lys  
35 40 45  
Ala Gly Pro Phe Gln Ser Ser Gln Pro Val Leu His Leu Val Pro Pro  
50 55 60  
Asp Pro Gly Met Glu Ala Leu Ser Pro Thr Val Trp  
65 70 75

<210> 874  
<211> 61  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (23)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (26)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (30)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (40)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (44)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (53)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

926

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 874

Arg	Thr	Leu	Phe	Lys	Thr	Gly	Ser	Ser	Ile	Gly	Trp	Ser	Asn	Lys	Asp
1				5					10					15	

Ser	Leu	Gln	Val	Gln	Phe	Xaa	Gly	Pro	Xaa	Gly	Lys	Leu	Xaa	Thr	Asn
		20						25					30		

His	Asn	Gly	Leu	Ile	Lys	Arg	Xaa	Thr	Ile	Ile	Xaa	Leu	Gln	Arg	Leu
		35					40					45			

Leu	Tyr	Arg	Gly	Xaa	Ile	Leu	Tyr	Leu	Pro	Gln	Xaa	Ser
	50					55					60	

&lt;210&gt; 875

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (67)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (77)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 875

Lys	Leu	His	Leu	Gln	Ile	Phe	Leu	Pro	Met	Asn	Asn	Val	Val	Asp	Ser
1				5					10					15	

Val	His	Ser	Phe	Ser	Leu	Ser	Leu	Ser	Leu	Ser	His	Thr	His	Thr	His
			20					25					30		

Thr	His	Thr	His	Thr	His	Arg	His	Gly	Thr	Ile	Leu	Pro	Gly	Ala	Leu
		35					40					45			

Glu	His	Ile	Pro	Gly	Gly	His	Arg	Trp	Ser	Glu	Ser	Leu	Gly	Gly	Tyr
	50					55						60			



927

Leu Ser Xaa Leu Gly Xaa Pro Asn Val Ser Trp Gly Xaa  
65 70 75

&lt;210&gt; 876

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 876

Leu Val Pro Asn Ser Ala Arg Gly Glu Arg Glu Arg Glu Arg Glu Arg  
1 5 10 15

Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg Glu Arg  
20 25 30

Glu Arg Glu Arg Glu Xaa Gly Xaa Xaa  
35 40

&lt;210&gt; 877

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 877

Leu	Asp	Leu	Leu	Tyr	Arg	Asp	Met	Val	Gln	Xaa	Gly	Leu	Leu	Lys	Phe
1				5					10					15	

Ile	Glu	His	Xaa	Asn	Tyr	Glu	Thr	Xaa	Thr	Phe	Tyr	Ile	Ser	Glu	Asp
			20					25					30		

Met	Gly	Xaa	Asn	Leu	Trp	Lys	Ile	Gln	Val	Ala	Gly	Xaa
		35					40					45

<210> 878

<211> 107

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (83)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

929

&lt;222&gt; (97)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 878

Arg Gly Pro Arg Ala Arg Asp Ala Ala Ala Leu Pro Pro Pro Thr Pro  
 1 5 10 15

Thr Ala Pro Ser Phe Ala Ser Ser Pro Gly Ala Ser Pro Arg His Arg  
 20 25 30

Arg Arg Pro Gly His Arg His Pro Pro Gln Pro Cys Pro Pro Gly Pro  
 35 40 45

Cys Pro Arg Pro Pro Thr Ala Gly Cys Ser Ala Ala Arg Ala Pro Arg  
 50 55 60

Ala Gly Arg Ala Xaa Arg Glu Leu Arg Asp Tyr Val Thr Arg Thr Tyr  
 65 70 75 80

Ser Leu Xaa Ser Ala Leu Ser Pro Asn Xaa Ser Arg Thr Ser Thr Leu  
 85 90 95

Xaa Pro Gly Arg Arg Val Cys His Ala Leu Leu  
 100 105

&lt;210&gt; 879

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 879

Ile Leu Thr Tyr Ile Phe Thr Pro Asn Phe Thr Phe Ser Glu Ile Arg  
 1 5 10 15

Ile Ser Leu Val Ala Gln Leu Thr Xaa Asn Gln Glu Ser Phe Lys Lys  
 20 25 30

Met Ile Leu Lys Met Ala Gly Lys Ile Ser Phe Tyr Cys Arg Gln Phe  
 35 40 45

930

Leu Asn Trp Lys Phe Gly Xaa Met His Asn Lys Ser Cys Gly  
50 55 60

&lt;210&gt; 880

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 880

Gly Thr Arg Arg Glu Arg Glu Arg Xaa Arg Glu Arg Glu Arg Glu Arg  
1 5 10 15

Glu Arg Glu Arg Glu Arg Glu Xaa Xaa  
20 25

&lt;210&gt; 881

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

931

<221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (55)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (59)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (61)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (64)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (69)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (70)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 881  
 Arg Cys Ala Ile Asp Phe Phe Ser Ser Trp Leu Phe Asn Ser Pro Val  
   1                  5                  10                  15  
 Ser Ile Thr Val Leu Pro His Xaa Gly Xaa Thr Glu Arg Lys Leu Ala  
                   20                  25                  30  
 Phe Leu Phe Phe Leu Gly Pro Leu Pro Pro Arg Pro Leu Asn Phe Trp  
           35                  40                  45  
 Asn Pro Lys Glu Asn Xaa Xaa Gly Lys Thr Xaa Phe Xaa Gly Phe Xaa  
   50                  55                  60  
 Lys Asn Trp Glu Xaa Xaa Pro  
   65                  70

932

<210> 882  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (32)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (106)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (119)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (127)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 882  
 Ala Gln Pro Arg Thr Gly Val Asp Ser Pro Thr Ser Thr Ser Phe Leu  
   1                  5                  10                  15  
 Leu Cys Ser Gln Thr Met Ser Gly Pro Pro Ser Ser Arg Ala Arg Xaa  
                   20                  25                  30  
 Pro Gly Gly Ser Ser Pro Thr Pro Thr Pro Val Ser Ala Gly Thr Gly  
           35                  40                  45  
 Ser Phe Leu Arg Ala Lys Val Lys Asp Pro Leu Cys Glu Gly Ser Ala  
   50                  55                  60  
 Glu Val Gly Ser His Ala Pro Ser Arg Pro Leu Pro Ala Leu His Ser  
   65                  70                  75                  80  
 Gly Arg Asn Leu Ser Phe Pro Cys Glu Lys Gly Gln Arg Val Gln Ala  
                   85                  90                  95  
 Ser Gln Val Gln Arg Glu Gly Pro Gln Xaa Leu Leu Ala Ala Lys His  
           100                  105                  110  
 Ala Asp Pro Met Asp Ile Xaa Gly Lys Gly Ser Leu Pro Ala Xaa  
   115                  120                  125

<210> 883  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (37)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (60)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (62)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 883  
 Lys Met Lys Pro Lys Met Lys Tyr Ser Thr Asn Lys Ile Ser Thr Ala  
     1                    5                    10                    15  
 Lys Trp Lys Asn Thr Ala Ser Lys Ala Leu Cys Phe Lys Leu Gly Lys  
                     20                    25                    30  
 Ser Gln Gln Lys Xaa Lys Glu Val Cys Pro Met Tyr Phe Met Lys Leu  
             35                    40                    45  
 Arg Ser Gly Leu Met Ile Lys Lys Glu Ala Trp Xaa Phe Xaa Arg Glu  
     50                    55                    60  
 Thr Thr  
     65

<210> 884  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

934

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 884

Gly Ala Met Arg Gly Asp Arg Gly Leu Trp Ser Trp Xaa Thr Leu Xaa  
 1 5 10 15

&lt;210&gt; 885

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 885

Glu Gln Leu Lys Glu His Thr Arg Leu Cys Ser Lys Ile Val Gly Arg  
 1 5 10 15

Phe Ile Gly Arg Gly Asp Lys Pro Thr Glu Pro Gly Asp Ser Trp Leu  
 20 25 30

Ser Lys Ile Glu Ser  
 35

&lt;210&gt; 886

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 886

Arg Arg Gly Phe Pro Gly Tyr Met Tyr Thr Asp Leu Ala Thr Ile Tyr  
 1 5 10 15

Glu Arg Ala Gly Arg Val Glu Gly Arg Asn Gly Ser Ile Thr Gln Ile  
 20 25 30

Pro Ile Leu Thr Met Pro Asn Asp Asp Ile Thr His Pro Ile Pro Asp  
 35 40 45

Leu Thr Gly Tyr Ile Thr Glu Gly Gln Ile Tyr Val Asp Arg Gln Leu  
 50 55 60

His Asn Arg Gln Ile Tyr Pro Pro Ile Asn Val Leu Pro Ser Leu Ser  
 65 70 75 80



Thr Val Asn Glu Val Cys Tyr Trp Arg Arg Gly  
85 90

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<210> 887
<211> 733
<212> DNA
<213> Homo sapiens
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<400>	887						
gggatccgga	gcccaaattct	tctgacaaaa	ctcacacatg	cccaccgtgc	ccagcacctg	60	
aattcgaggg	tgcaccgtca	gtcttctctt	tcccccaaa	acccaaggac	accctcatga	120	
tctcccgga	tcctgaggtc	acatgcgtgg	tggtggacgt	aagccacgaa	gaccctgagg	180	
tcaagttcaa	ctggtacgtg	gacggcgtgg	aggtgcataa	tgccaagaca	aagccgcggg	240	
aggagcagta	caacagcacg	taccgtgtgg	tcagcgtcct	caccgtcctg	caccaggact	300	
ggctgaatgg	caaggagtac	aagtgcaagg	tctccaacaa	agccctccca	accccatcg	360	
agaaaaccat	ctccaaagcc	aaagggcagc	cccgagaacc	acaggtgtac	accctgcccc	420	
catcccggga	tgagctgacc	agaaccagg	tcagcctgac	ctgcctggtc	aaaggcttct	480	
atccaagcga	catcgccgtg	gagtgggaga	gcaatgggca	gccgggagaac	aactacaaga	540	
ccaagcctcc	cgtgctggac	tccgacggct	ccttcttctt	ctacagcaag	ctcaccgtgg	600	
acaagcagag	gtggcagcag	gggaacgtct	tctcatgctc	cgtgatgcat	gaggctctgc	660	
acaaccacta	cacgcagaag	agcctctccc	tgtctccggg	taaatgagtg	cgacggccgc	720	
gactctagag	gat					733	

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<210> 888
<211> 5
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 888  
Trp Ser Xaa Trp Ser  
1 5

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<210> 889
<211> 86
<212> DNA
<213> Homo sapiens
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<400> 889  
gcgccctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60

cccgaaatat ctgccatctc aattag

86

<210> 890

<211> 27

<212> DNA

<213> Homo sapiens

<400> 890

gcggcaagct ttttgcaaag cctaggc

27

<210> 891

<211> 271

<212> DNA

<213> Homo sapiens

<400> 891

ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60  
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120  
gcccctaact ccgcccagtt ccgcccattc tccgcccacat ggctgactaa ttttttttat 180  
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240  
ttttggaggc ctaggctttt gcaaaaagct t 271

<210> 892

<211> 32

<212> DNA

<213> Homo sapiens

<400> 892

gcgctcgagg gatgacagcg atagaacccc gg

32

<210> 893

<211> 31

<212> DNA

<213> Homo sapiens

<400> 893

gcgaagcttc gcgactcccc ggatccgcct c

31

<210> 894

<211> 12

<212> DNA

<213> Homo sapiens

<400> 894

ggggactttc cc

12

<210> 895  
<211> 73  
<212> DNA  
<213> Homo sapiens

<400> 895  
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60  
ccatctcaat tag 73

<210> 896  
<211> 256  
<212> DNA  
<213> Homo sapiens

<400> 896  
ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60  
caattagtca gcaaccatag tcccgccct aactccgccc atcccgcccc taactccgcc 120  
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180  
ggcgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240  
cttttgcaaa aagctt 256